



RULE-MAKING ORDER
(RCW 34.05.360)

#5018

CR-103 (10/1/89)

Agency: **Washington State Department of Agriculture**

Permanent Rule
 Emergency Rule

(1) Date of adoption: October 29, 1993

(2) Purpose: To protect the state's groundwater from contamination by agricultural chemicals at sites where large amounts of bulk pesticide and fertilizer products are stored or where large amounts of these products are mixed and transferred into application equipment.

(3) Citation of existing rules affected by this order:
Repealed:
Amended: N/A
Suspended:

(4) Authority for adoption:
Statute: RCW 15.54.800 and RCW 15.58.040
Other Authority:

(5.1) PERMANENT RULE ONLY
Pursuant to notice filed as WSR 93-12-044 93-18-011 93-19-066 on May 26, 1993 August 20, 1993 September 13, 1993 (date).

Describe any changes other than editing from proposed to adopted version:
Definition of temporary field storage allows for twenty one days at the same location, increased from 14 days for the first five years, then the definition reverts to the fourteen days. Also secondary containment facilities already in operation are exempt from the sloped floor requirement until such time the facility is altered or storage volume is increased.

(5.2) EMERGENCY RULE ONLY
Pursuant to RCW 34.05.350 the agency for good cause finds:
 (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
 (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.
Reasons for this finding:

(5.3) Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
 Yes No If yes, explain:

(6) Effective date of rule:
Permanent Rules Emergency Rules
 31 days after filing Immediately
 Other (specify) March 1, 1994 Later (specify) _
*(If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

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BOB REVISER COUNCIL
STATE OF WASHINGTON
NOV 4 1993
TIME 1:58
NOV 93-22-093

NAME (TYPE OR PRINT)
John M. King

SIGNATURE
John M. King

TITLE
Acting Director

DATE
10-29-93

Chapter 16-201 WAC

FERTILIZER BULK STORAGE AND OPERATIONAL AREA CONTAINMENT RULES

NEW SECTION

WAC 16-201-010 Definitions. The definitions set forth in this section shall apply throughout this chapter, unless the context otherwise requires.

(1) "**Appurtenances**" means all valves, pumps, fittings, pipes, hoses and metering devices which are connected to a storage container, or which are used to transfer a material into or out of such storage container.

(2) "**Bulk fertilizer**" means commercial fertilizer distributed in a nonpackage form such as, but not limited to, tote bags, tanks, trailers, spreader trucks, and railcars.

(3) "**Commercial fertilizer**" means any substance containing one or more recognized plant nutrients and which is used for its plant nutrient content and/or which is designated for use or claimed to have value in promoting plant growth, and shall include limes, gypsum, and manipulated animal and vegetable manures. It shall not include unmanipulated animal and vegetable manures and other products exempted by the department by rule: *Provided*, That for the purpose of this chapter calcium carbonate (lime) and anhydrous ammonia are exempt: *Provided further*, That this rule does not apply to materials (including but not limited to compost, biosolids, or municipal sewage sludge), or to products derived therefrom, which are regulated pursuant to the provisions of chapter 70.95 or 70.95J RCW, or rules adopted thereunder.

(4) "**Department**" means the Washington state department of agriculture.

(5) "**Discharge**" means a spill, leak, or release, accidental or otherwise, from a storage container, container or appurtenance. It does not include a fully contained transfer of fertilizer made pursuant to sale, storage, distribution or use.

(6) "**Dry fertilizer**" means fertilizer in solid form.

(7) "**Liquid fertilizer**" means fertilizer in liquid form, and includes solutions, emulsions, suspensions and slurries. Liquid fertilizer does not include anhydrous ammonia.

(8) "**Operational area**" means an area or areas at a fertilizer bulk storage facility where fertilizers are transferred, loaded, unloaded, mixed, repackaged, refilled or where fertilizers are cleaned, washed or rinsed from containers or application, handling, storage or transportation equipment.

(9) "**Operational area containment**" means any structure or system designed and constructed to intercept and contain discharges, including storage container or equipment wash water,

rinsates, and rain water from the operational area(s) of fertilizer bulk storage facilities.

(10) **"Permanent storage facility"** means a location at which liquid bulk fertilizer in excess of five hundred U.S. gallons or dry bulk fertilizer in undivided quantities exceeding fifty thousand pounds is held in storage: *Provided*, That temporary field storage is allowed. Effective March 1, 1999, **"temporary field storage"** shall mean a primary bulk fertilizer storage container of ten thousand gallons or less that remains in the same location for no more than twenty-one consecutive days in any six-month period. Effective March 1, 2004, **"temporary field storage"** shall mean a primary bulk fertilizer storage container of ten thousand gallons or less that remains in the same location for no more than fourteen consecutive days in any six-month period. Temporary field storage may be extended upon request by written permit. The department shall be notified in writing, upon request, of the physical location of all temporary field storage sites. Liquid bulk fertilizer storage containers directly attached to an apparatus for the purpose of fertigation are exempt from this chapter.

(11) **"Primary containment"** means the storage of liquid or dry bulk fertilizer in storage containers at a permanent storage facility.

(12) **"Rinsate"** means the liquid generated from the rinsing of any equipment or container that has come in direct contact with any fertilizer.

(13) **"Secondary containment"** means a device or structure designed, constructed, and maintained to hold or confine a discharge of a liquid fertilizer from a storage facility.

(14) **"Storage container"** means a container, including a railcar, nurse tank or other mobile container, that is used for the storage of bulk liquid or dry fertilizer. It does not include a mobile container at a storage facility for less than thirty days if this storage is incidental to the loading or unloading of a storage container at the bulk fertilizer storage facility.

(15) **"Washwater"** means the liquid generated from the rinsing of the exterior of any equipment, containers or secondary containment or operational areas which have or may have come in direct contact with any fertilizer.

NEW SECTION

WAC 16-201-020 Secondary containment of liquid bulk fertilizers--General requirements. Primary storage of bulk liquid fertilizers at a storage facility shall be located within a secondary containment facility designed to prevent the release of discharged fertilizers. A secondary containment facility shall consist of:

(1) A wall and liner with a sloped floor as provided in WAC 16-201-028 and 16-201-030; or

(2) A prefabricated facility as provided in WAC 16-201-040.

(3) Secondary containment facilities in operation prior to March 1, 1994, which do not have sloped floors shall be exempt from this section: *Provided*, That upon alteration to the facility or

increase of storage volume, the facility shall be brought into full compliance with this section.

NEW SECTION

WAC 16-201-025 Secondary containment of liquid bulk fertilizers--Capacity. (1) The secondary containment facility shall contain at least one hundred twenty-five percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the containment area: *Provided*, That storage facilities that have tanks of one hundred thousand gallons or greater capacity may use the following method to meet the capacity requirement: The facility shall contain at least one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the area plus sufficient volume to contain the precipitation from a twenty-five year, twenty-four hour storm event.

(2) If the secondary containment facility is located indoors or under a roof to prevent accumulation of rainfall, the area shall contain at least one hundred ten percent of the volume of the largest storage container plus the displacement of all other tanks, appurtenances and other items within the containment area.

(3) Secondary containment facilities in operation prior to March 1, 1994, and which have a capacity of at least one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the containment area shall be considered to be in compliance with this section: *Provided*, That upon alteration to the facility or increase of storage container volume the facility shall be brought into full compliance with the specific capacity requirement of this section.

NEW SECTION

WAC 16-201-028 Secondary containment of liquid bulk fertilizers--Walls. (1) The walls of a secondary containment facility shall be constructed of steel, poured reinforced concrete, precast concrete modules, solid masonry, or other materials that will provide similar protection. Walls constructed of earth shall be allowed at storage facilities which have tanks of one hundred thousand gallons or greater capacity and at other facilities when a synthetic liner is used. The wall shall be designed to withstand a full hydrostatic head of any discharged liquid, and shall be properly sealed to prevent leakage.

(2) Earthen walls shall have a horizontal to vertical slope of at least three to one, unless a steeper slope is consistent with good engineering practice, and shall be packed and protected from

erosion. The top of earthen walls shall be at least two feet six inches wide.

(3) Any piping through the outside walls of a secondary containment facility shall be installed and maintained such that the structural integrity of the wall is preserved and in such a manner as to prevent leaks.

NEW SECTION

WAC 16-201-030 Secondary containment of liquid bulk fertilizers--Lining. The base of a secondary containment facility shall be lined with steel, concrete or a synthetic liner: *Provided*, That facilities with storage tanks of one hundred thousand gallons or greater may use clay soil liners. The secondary containment floor shall slope to a liquid tight collection point or sump that allows spilled or deposited materials to be easily removed.

(1) Concrete liners: Concrete liners shall be designed according to good engineering practices to withstand any foreseeable loading conditions, including a full hydrostatic head of discharged liquid, and shall be properly sealed to prevent leakage.

(2) Synthetic liners:

(a) Synthetic liners shall be chemically compatible with the materials being stored within the facility and have a minimum thickness of thirty mils +/- 1 mil. A written confirmation of compatibility and a written estimate of the life of the liner from the manufacturer shall be kept on file at the storage facility or the nearest local office from which the facility is administered.

(b) Synthetic liners shall be installed under the supervision of a qualified representative of the manufacturer, a contractor certified by the manufacturer, or a certified engineer. All field constructed seams shall be tested, and repaired if necessary, in accordance with the manufacturer's recommendations.

(3) Soil liners: The surface soil shall be sealed, including the berm of an earthen dike, with a sealing agent such as sodium bentonite, attapulgite or a similar clay material. The liner shall be constructed in accordance with reliable civil engineering practices, to achieve a coefficient of permeability not to exceed 1×10^{-6} cm/sec and shall be maintained at 1×10^{-5} cm/sec with a thickness of not less than six inches. The floor and internal walls of the containment area shall have a protective barrier to prevent desiccation, evaporation, freeze, thaw, or other physical damage.

(4) Exemptions. A liner need not be installed directly under a storage container having a capacity of one hundred thousand gallons or more which has been constructed on site and put into use prior to March 1, 1994: *Provided*, That one of the following alternative procedures are complied with, certified to in writing by an official of the company which owns the storage container, and the certificate is filed with the department:

(a) Alternative 1 is as follows:

(i) A second bottom made of steel shall be constructed for the storage container. The second bottom shall be placed over the original bottom and separated from the original bottom by a support medium designed to provide for leak detection between the two bottoms and properly support the new bottom. This support layer may consist of gravel, sand, concrete (grooved to provide leak detection), steel or other grillage, wire mesh, etc. as dictated by good engineering practice.

(ii) The original bottom of the storage container shall be tested for leaks before the support layer and second bottom are installed. A record of the test shall be kept on file at the storage facility or at the nearest local office from which the storage facility is administered.

(iii) The newly constructed bottom shall be tested for leaks before any liquid fertilizer is stored on the newly constructed bottom. A record of the test shall be kept on file at the storage facility or at the nearest local office from which the storage facility is administered.

(iv) There shall be a system to readily detect leaks through the newly constructed bottom into the support layer. Leak tests should be conducted at not more than six-month intervals with a record of such tests to be kept at the storage facility or at the nearest local office from which the storage facility is administered.

(b) Alternative 2 is as follows:

(i) The storage container shall be emptied, cleaned, and tested for leaks. The walls and floor of the storage container shall be tested to assure that welds and thickness of steel plates are sound and adequate to contain the fertilizers. A record of the inspection, test results, and of any repairs made shall be submitted to the department and maintained by the owner or operator.

(ii) The interior floor and twelve inches up the wall of the storage container shall be coated with a liner to inhibit corrosion. A record of this procedure shall be submitted to the department and maintained by the owner or operator.

(iii) A test for leaks and liner deterioration or metal corrosion shall be conducted every five years thereafter. A record of the test findings and of indicated repairs and maintenance shall be maintained by the owner or operator.

(c) Alternative 3 is as follows:

(i) Monitoring devices shall be installed in angled borings under each tank. These monitoring devices shall constitute a leak detection system for each tank in advance of the point at which any leak would reach groundwater.

(ii) The number, length, and depth of each boring shall be determined on the basis of site characteristics. The array of monitoring devices under each tank shall constitute the best practical early warning detection system for tank leakage.

(iii) Each monitoring plan under alternative 3 shall be implemented only upon review and written approval of the department and shall include inspection/monitoring schedules.

NEW SECTION

WAC 16-201-040 Secondary containment of liquid bulk fertilizers--Prefabricated facilities. (1) A prefabricated facility shall be composed of a rigid prefabricated basin having both a base and walls constructed of steel or synthetic materials which are resistant to corrosion, puncture or cracking. Materials used in the facility shall be chemically compatible with the products being stored within the facility. A written confirmation of compatibility from the basin manufacturer shall be kept on file at the storage facility or at the nearest local office from which the storage facility is administered.

(2) The prefabricated facility shall be designed and installed to withstand all foreseeable loading conditions, including the tank load and a full hydrostatic head of any discharged liquid. Multiple basins connected to provide the capacity required in WAC 16-201-025 shall be connected in a manner which assures an adequate transfer of discharged liquid between basins.

NEW SECTION

WAC 16-201-050 Secondary containment of liquid bulk fertilizers--Discharge outlets or valves. Secondary containment facilities, including prefabricated facilities, shall not have discharge outlets or valves. Discharge outlets or valves on existing facilities shall be sealed. Secondary containment facilities may be interconnected.

NEW SECTION

WAC 16-201-060 Secondary containment of liquid bulk fertilizers--Storage with other commodities. (1) No other commodity except fertilizer, fertilizer rinsate, recovered fertilizer discharges, or pesticide rinsate may be stored within a liquid fertilizer secondary containment facility.

(2) A liquid fertilizer secondary containment facility may share a wall or portion of a wall, with a liquid pesticide secondary containment facility.

NEW SECTION

WAC 16-201-070 Secondary containment of liquid bulk fertilizers--Precipitation accumulations. Precipitation may not be allowed to accumulate in a secondary containment facility to the point where it may tend to:

(1) Reduce the capacity of the facility to allow one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the containment area.

(2) Increase corrosion of storage containers or appurtenances.

(3) Impair the stability of storage containers.

NEW SECTION

WAC 16-201-080 Secondary containment of liquid bulk fertilizers--Recovery of discharges. Discharges within a secondary containment facility shall be immediately recovered.

NEW SECTION

WAC 16-201-100 Primary containment of liquid bulk fertilizers--Permanent storage facility. Permanent storage facility general requirements:

(1) Storage containers and appurtenances shall be constructed, installed and maintained so as to prevent the discharge of liquid fertilizer.

(2) Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture or cracking.

(3) Materials used in the construction or repair of storage containers and appurtenances may not be of a type which react chemically or electrolytically with stored liquid fertilizer in a way which may weaken the storage container or appurtenances, or create a risk of discharge.

(4) Metals used for valves, fittings and repairs on metal storage containers shall be compatible with the metals used in the construction of the storage container, so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances, or create a risk of discharge.

(5) Storage containers and appurtenances shall be designed to handle all operating stresses, taking into account static head, pressure build up from pumps and compressors, and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operations.

(6) Every fertilizer storage container connection, except a safety relief valve connection, shall be equipped with a manual shut-off valve located on the storage container or at a distance from the storage container dictated by standard engineering practice.

(7) Appurtenances shall be adequately supported to prevent sagging and possible breakage because of gravity and other forces encountered in the ordinary course of operation.

(8) Fertilizer storage containers and appurtenances shall be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles or objects.

(9) Tanks designed as underground storage tanks shall not be used as above ground storage tanks for fertilizer unless they are designed and approved for above ground use or have been inspected and approved by a certified engineer. A record of the inspection and approval shall be maintained as a permanent record.

NEW SECTION

WAC 16-201-110 Primary containment of liquid bulk fertilizers--Prohibition against underground storage. No person shall store liquid fertilizer in an underground storage container or a lined pit. A watertight catch basin or sump used for the temporary collection of rinsate or runoff from transfer and loading areas is exempt from this section.

NEW SECTION

WAC 16-201-120 Primary containment of liquid bulk fertilizers--Abandoned storage containers. (1) Storage containers used at a storage facility to hold liquid bulk fertilizer or fertilizer rinsate are considered abandoned if they have been out of service for more than six consecutive months because of a weakness or leak, or have been out of service for any reason for more than two years without an integrity test having been performed.

(2) Abandoned underground storage containers containing fertilizer which meet the definition of hazardous substance underground storage tank system in chapter 173-360 WAC are subject to the applicable requirements in that chapter.

(3) Abandoned above ground storage containers shall be thoroughly cleaned. All hatches on the storage containers shall be secured and all valves or connections shall be severed or plugged with vents being left functional.

NEW SECTION

WAC 16-201-130 Primary containment of liquid bulk fertilizers--Anchoring of storage containers. Storage containers shall be secured, as necessary, to prevent flotation or instability which might occur as a result of liquid accumulations within a secondary containment facility.

NEW SECTION

WAC 16-201-140 Primary containment of liquid bulk fertilizers--Filling storage containers. Storage containers may not be filled beyond the capacity for which they are designed, taking into account the density of the liquid being stored and thermal expansion during storage.

NEW SECTION

WAC 16-201-150 Primary containment of liquid bulk fertilizers--Liquid level gauging device. (1) Every storage container shall be equipped with a liquid level gauging device by which the level of liquid in the storage container can be readily and safely determined.

(2) A liquid level gauging device is not required if the level of fluid in a storage container can be readily and reliably measured by other means.

(3) Liquid level gauging devices shall be secured, in a safe manner, to protect against breakage or vandalism which may result in a discharge.

(4) External sight gauges are prohibited unless they are equipped with an automatic shut-off valve.

NEW SECTION

WAC 16-201-160 Primary containment of liquid bulk fertilizers--Security. All bulk fertilizer storage containers and appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access. Valves on storage containers shall be closed and locked or otherwise secured when left unattended. Locks on end valves shall be considered adequate security for containers and appurtenances. For purposes of this section, unattended means there is no employee on the property for a period of twelve hours or longer.

NEW SECTION

WAC 16-201-170 Primary containment of liquid bulk fertilizers--Labeling. (1) All bulk fertilizer storage containers shall be clearly and conspicuously labeled to identify the contents.

(2) All bulk fertilizer storage containers shall bear a label or placard in accordance with Uniform Fire Code Standard No. 79-3, identifying the material therein.

(3) All bulk fertilizer storage containers used for field storage shall be labeled with the owner's name, the capacity of the tank, and an identifying number. Lettering shall be a minimum of two inches in height and in a color contrasting to the background.

NEW SECTION

WAC 16-201-180 Primary containment of liquid bulk fertilizers--Field storage. (1) Storage containers used for field storage of liquid bulk fertilizer shall comply with the following sections: WAC 16-201-100, 16-201-110, 16-201-120, 16-201-140, 16-201-150, and 16-201-170.

(2) All bulk fertilizer storage containers and appurtenances used for field storage shall be inspected for leakage and soundness daily when in use.

(3) Valves on storage containers shall be closed and locked or otherwise secured when left unattended.

NEW SECTION

WAC 16-201-190 Operational area containment of liquid fertilizers--Permanent storage facility. (1) All operational area activities shall take place on or within an operational area containment facility: *Provided*, That during the unloading or loading of railcars, marine vessels, or manned trucks when product is unloaded from direct shipments from manufacturers, individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) The operational area containment facility shall be designed and constructed to contain fertilizers, rinsates, washwater and other materials spilled or deposited during mixing, loading, unloading, draining, rinsing and washing activities.

(3) The operational area containment facility shall be constructed of concrete or other material with similar permeability.

(4) If synthetic materials are used in construction they shall be chemically compatible with the products handled at the site. A written confirmation of compatibility from the manufacturer shall be kept on file at the site or the nearest location from which the site is administered.

(5) The facility shall be constructed to withstand the weight of any vehicles or storage containers which will be on the facility.

(6) The facility shall be constructed with sufficient surface area, using curbs or other means, to prevent any discharge from leaving the containment area. The facility shall have a capacity of at least fifteen hundred gallons of containment. If no storage container or mobile storage container used at the facility to transfer liquid bulk fertilizers has a capacity of more than one

thousand gallons, the containment facility shall be of adequate size and design to contain one hundred twenty-five percent the capacity of the largest storage container, or mobile storage container used.

(7) The operational area containment facility shall slope to a liquid tight collection point or sump that allows spilled or deposited materials to be easily recovered. An above ground tank may be used in conjunction with the containment facility to meet the capacity requirement. If an above ground tank is used for temporary storage, the tank shall be located within secondary containment. The tank shall be clearly and conspicuously labeled "fertilizer rinsate."

(8) Any pump used for recovering material from the operational area containment facility shall be manually activated.

(9) The operational area containment facility shall not have a discharge outlet or valve. Discharge outlets or valves on existing facilities shall be sealed. Operational area containment facilities may be interconnected.

NEW SECTION

WAC 16-201-200 Operational area containment of liquid fertilizers--Field storage. (1) During loading and unloading of liquid bulk fertilizer at field storage locations individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) Liquid bulk fertilizer storage containers used for field storage shall be located at least one hundred feet from wells and surface water except, for purposes of this section, irrigation water flowing directly to a field, or on a field, is not considered surface water unless the water could be carried beyond the field being irrigated.

NEW SECTION

WAC 16-201-210 Dry bulk fertilizer storage and handling. (1) Dry bulk fertilizer shall 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; or

(2) If dry bulk fertilizer is stored outdoors, it shall be placed on a ground cover sufficiently impermeable to prevent seepage or runoff and shall be completely covered with a tarpaulin or other suitable covering to prevent contact with precipitation and surface water.

(3) All loading, unloading, mixing and handling of dry bulk fertilizer at the storage facility shall be conducted on a surface of a size and design that will allow for the collection of spilled materials.

(4) Operational areas shall be cleaned to prevent accumulation of dry bulk fertilizer spilled during loading and unloading.

NEW SECTION

WAC 16-201-220 Backflow prevention. (1) If plumbing within a secondary containment facility or an operational area facility is directly connected to a well or public water supply system, a backflow prevention device shall be installed to protect the water source. All equipment shall be installed, operated and maintained per WAC 246-290-490 and manufacturer's recommendations. The safety equipment shall be one of the following:

(a) A reduced pressure principle backflow prevention assembly approved by the Washington state department of health.

(b) Air gap separation. Air gap is a physical separation between the free flowing discharge end of a water supply line and the fill opening of a water storage tank. The end of the discharge pipe shall be located a distance of at least two times the diameter of the supply line measured vertically above the flood rim of the tank. The gap should be increased if the fill pipe is located next to a wall. If the discharge pipe is located within a secondary containment or operational area facility the end of the pipe shall be at least two pipe diameters above the highest liquid holding capacity of the containment facility.

(2) Reduced pressure principle backflow prevention assemblies shall be inspected and tested once per year and air gap systems shall be inspected once per year by a Washington state department of health certified backflow assembly tester pursuant to WAC 246-290-490.

NEW SECTION

WAC 16-201-230 Rinsate management. (1) Fertilizer products, rinsates or washwater spilled or accumulated within a secondary or operational area facility shall be immediately recovered. These materials may be applied at normal fertilizer rates or used in a liquid mixing operation. The materials may be stored for later use.

(2) Any liquid that accumulates at a collection point or in a sump shall be removed within twenty-four hours when the facility is in operation.

(3) Recovered spills, sedimentation, rinsates, washwater, contaminated precipitation or other contaminated debris shall be contained and used or properly disposed of. Fertilizer containing materials shall not be released to the environment unless the release is an agronomic application.

NEW SECTION

WAC 16-201-240 Maintenance and inspection. (1) The operator of a fertilizer bulk storage facility shall inspect and maintain storage containers, appurtenances, secondary containment facilities and operational area facilities to minimize the risk of a fertilizer release. The inspection shall include a visual observation for any evidence of leaks, spills, cracks, solar decay or wear.

(2) Maintenance of the fertilizer bulk storage facilities shall be performed as needed to ensure that the integrity of the bulk fertilizer storage containers, secondary containment facilities and operational area containment facilities is maintained.

(3) Bulk fertilizer storage containers and appurtenances shall be inspected at least once per month when in use. Secondary containment and operational area facilities shall be inspected at least once per month when in use.

(4) All secondary and operational area facilities shall be maintained free of debris and foreign matter.

(5) A written record of all inspections and maintenance shall be made on the day of the inspection or maintenance and kept at the storage site or at the nearest local office from which the storage site is administered.

(6) Inspection records shall contain the name of the person making the inspection, the date of the inspection, conditions noted and maintenance performed.

NEW SECTION

WAC 16-201-250 Recordkeeping requirements. Records required by this section and documents necessary to ensure compliance with this chapter shall be made available for inspection and copying by the department. The following records shall be maintained at fertilizer bulk storage facilities or at the nearest local office from which the storage facility is administered.

(1) A record of construction materials and methods of construction to show compliance with WAC 16-201-025, 16-201-028, 16-201-030, 16-201-040, 16-201-050, and 16-201-190. These records shall be maintained as permanent records.

(2) A record of the method(s) used to use or dispose of product or contaminated materials recovered from discharges outside secondary or operational area containment facilities. This record applies only to discharges required to be reported to the Washington state department of ecology by the Washington state Dangerous waste regulations, chapter 173-303 WAC. These records shall be maintained for a period of at least three years.

(3) Inspection and maintenance records required by WAC 16-201-240. These records shall be maintained for a period of at least three years.

(4) Manufacturer's compatibility statements required by WAC 16-201-030 and 16-201-040. These records shall be maintained as permanent records.

(5) A copy of the facility's spill response plan required by WAC 16-201-260. This record shall be maintained as a permanent document.

(6) Records required by WAC 16-201-100(9). These records shall be maintained as permanent records.

(7) Records required by WAC 16-201-220, Backflow prevention.

NEW SECTION

WAC 16-201-260 Spill response plan. (1) The operator of a storage facility shall prepare a written spill response plan for the storage facility. If all or portions of the information required by the spill response plan have been prepared for plans required by other government agencies, they need not be prepared for this plan: *Provided*, That the information is readily accessible to emergency responders and department personnel. However, when copies of the plan are distributed, all required information shall be provided.

The plan shall include the following elements:

(a) The identity and telephone numbers of the persons and agencies who are to be contacted in the event of a spill, including persons responsible for the stored fertilizer.

(b) For each fertilizer stored at the facility a complete copy of the storage container labeling required in WAC 16-201-170, and the labeling required to accompany sale of the fertilizer under the Washington Commercial Fertilizer Act, chapter 15.54 RCW.

(c) A material safety data sheet for each fertilizer stored at the facility.

(d) The procedures to be used for controlling and recovering, or otherwise responding to a spill for each type of bulk fertilizer stored at the facility.

(e) The procedures to be followed in using or disposing of a recovered spill.

(2) The plan shall be kept current at all times.

(3) A copy of the spill response plan shall be kept readily available for inspection and use at the storage facility or at the nearest local office from which the storage facility is administered and shall be available for inspection and copying by the department.

(4) A copy of the spill response plan shall be provided to the local fire department.

(5) Persons employed at bulk fertilizer storage facilities shall be trained in spill response procedures pursuant to the spill response plan.

(6) Emergency equipment and supplies. Every storage facility shall have access to pumps and recovery containers which can be used to control and recover spills. Pumps, recovery containers and persons capable of deploying and operating them shall be readily available in an emergency. Pumps and recovery containers may include those operated by a local fire department or other persons: *Provided*, That the use and availability of the pumps and recovery containers is arranged in advance as part of the spill response plan. Absorbent materials and other equipment suitable for the

control and clean up of smaller spills shall be available at the storage facility. The facility shall maintain a list showing the types and locations of clean-up supplies and equipment. The list shall be maintained at the storage facility or the nearest local office from which the facility is administered.

NEW SECTION

WAC 16-201-270 Compliance schedule. (1) New permanent storage facilities placed in service after March 1, 1994, shall immediately comply with this chapter.

(2) Existing permanent storage facilities in operation prior to March 1, 1994, shall comply with the following schedule: *Provided*, That permanent storage facilities which have tanks of one hundred thousand gallons or greater shall have a period of seven years from March 1, 1994, to comply with WAC 16-201-020 through 16-201-080, and 16-201-190:

(a) Secondary containment
WAC 16-201-020 through 16-201-080
except as otherwise provided in
WAC 16-201-025(3) five years after March 1, 1994

(b) Primary containment
WAC 16-201-100 through
16-201-180 one year after March 1, 1994

(c) Operational area
containment WAC 16-201-190 five years after March 1, 1994

(d) Dry bulk fertilizer
storage and handling
WAC 16-201-210 (1), (2), (4) one year after March 1, 1994
WAC 16-201-210(3) five years after March 1, 1994

(e) Backflow prevention
WAC 16-201-220 immediate

(f) Rinsate management
WAC 16-201-230 one year after March 1, 1994

(g) Maintenance and inspection
WAC 16-201-240 one year after March 1, 1994

(h) Recordkeeping requirements
WAC 16-201-250 one year after March 1, 1994

(i) Spill response plan
WAC 16-201-260 one year after March 1, 1994.

NEW SECTION

WAC 16-201-280 Permits. (1) The department may issue a permit exempting any person from a requirement under this chapter if compliance is not technically feasible in the judgment of the department and the department finds that alternative measures provide substantially similar protection. All information required to prove that substantially similar protection is possible shall be provided to the department by the person requesting the permit.

(2) An advisory group appointed by the director shall evaluate and advise the department on all requests for permits from this chapter.

NEW SECTION

WAC 16-201-290 Penalties. Any person who fails to comply with any provisions of this chapter shall be subject to imposition of a civil penalty as provided in chapter 15.54 RCW.

Chapter 16-229 WAC

SECONDARY AND OPERATIONAL AREA CONTAINMENT FOR BULK PESTICIDES

PART 1 GENERAL PROVISIONS

NEW SECTION

WAC 16-229-010 Definitions. The definitions set forth in this section shall apply throughout this chapter unless the context otherwise requires:

(1) "**Appurtenances**" means all valves, pumps, fittings, pipes, hoses, metering devices, and mechanical devices which are connected to a storage container, or which are used to transfer a material into or out of such container.

(2) "**Bulk pesticide**" means any registered pesticide which is transported or held in an individual container in undivided quantities of greater than fifty-five U.S. gallons liquid measure or one hundred pounds net dry weight.

(3) "**Department**" means the Washington state department of agriculture.

(4) "**Discharge**" means a spill, leak, or release, accidental or otherwise, from a storage container, container or appurtenance. It does not include a fully contained transfer of pesticide which is made pursuant to sale, storage, distribution or use.

(5) "**Dry pesticide**" means pesticide which is in solid form prior to any application or mixing for application, and includes formulations such as dusts, wettable powders, dry flowable powders, granules, and water dispersible granules.

(6) "**Liquid pesticide**" means pesticide in liquid form, and includes solutions, emulsions, suspensions, slurries, and pesticide rinsates.

(7) "**Mini-bulk pesticide**" means an amount of liquid pesticide greater than fifty-five gallons but not exceeding five hundred gallons which is held in a single container designed for ready handling and transport, which has been filled by the original pesticide manufacturer or repackager, and to which no substance has been added by any person.

(8) "**Operational area**" means an area or areas where pesticides are transferred, loaded, unloaded, mixed, repackaged, refilled or where pesticides are cleaned, or rinsed from containers or application, handling, storage or transportation equipment.

(9) **"Operational area containment"** means any structure or system designed and constructed to intercept and contain discharges, including storage container or equipment wash water, rinsates, and rainwater from the operational area(s).

(10) **"Permanent mixing/loading site"** means a site (location) at which more than three hundred gallons of liquid pesticide (formulated product) or three thousand pounds of dry pesticide or at which a total of fifteen hundred pounds of pesticides as active ingredients are being mixed, repackaged or transferred from one container to another within a calendar year: *Provided*, That wood preservative application systems already regulated by 40 CFR, Parts 264.570-575 and Parts 265.440-445 shall be exempt.

(11) **"Permanent storage facility"** means a location at which liquid bulk pesticide in a single container or aggregate quantities in excess of five hundred U.S. gallons or dry bulk pesticide in undivided quantities in excess of two thousand pounds is held in storage: *Provided*, That mini-bulk containers are exempt from this chapter: *Provided further*, That temporary field storage of up to two thousand five hundred gallons of bulk liquid pesticide is allowed for a period of no more than fourteen days in a six-month period at any one location. Temporary field storage may be extended upon written permit by the department: *Provided further*, That liquid bulk pesticide containers directly attached to an apparatus for the purpose of chemigation are exempt from this chapter.

(12) **"Pesticide"** means, but is not limited to:

(a) Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, snail, slug, fungus, weed, and any other form of plant or animal life or virus, except virus on or in a living person or other animal which is normally considered to be a pest or which the director may declare to be a pest;

(b) Any substance or mixture of substances intended to be used as a plant regulator, defoliant or desiccant; and

(c) Any spray adjuvant.

(d) For the purpose of establishing permanent mixing/loading site threshold values petroleum oils are exempt from this chapter.

(13) **"Primary containment"** means the storage of liquid or dry bulk pesticide in storage containers at a permanent storage facility.

(14) **"Rinsate"** means the liquid generated from the rinsing of any equipment or container that has come in direct contact with any pesticide.

(15) **"Secondary containment"** means a device or structure designed, constructed, and maintained to hold or confine a discharge of a liquid pesticide from a storage facility.

(16) **"Storage container"** means a container, including a rail car, nurse tank or other mobile container, that is used for the storage of bulk liquid or dry pesticide. It does not include a mobile container at a storage facility for less than fifteen days if this storage is incidental to the loading or unloading of a storage container at the bulk pesticide storage facility.

(17) **"Washwater"** means the liquid generated from the rinsing of the exterior of any equipment, containers or secondary containment or operational areas which have or may have come in direct contact with any pesticide.

NEW SECTION

WAC 16-229-015 Penalties. Any person who fails to comply with any provisions of this chapter shall be subject to denial, suspension, or revocation of any license, registration, or permit provided for in chapters 15.58 and 17.21 RCW and/or imposition of a civil penalty as provided therein.

**PART 2
PERMANENT STORAGE FACILITIES**

NEW SECTION

WAC 16-229-020 Secondary containment of liquid bulk pesticides--General requirements. Primary storage of bulk liquid pesticides at a storage facility shall be located within a secondary containment facility designed to prevent the release of discharged pesticides. A secondary containment facility shall consist of:

(1) A wall and liner with a sloped floor as provided in WAC 16-229-030 and 16-229-040; or

(2) A prefabricated facility as provided in WAC 16-229-050.

(3) Secondary containment facilities in operation prior to March 1, 1994, which do not have sloped floors shall be exempt from this section: *Provided*, That upon alteration to the facility or increase of storage volume, the facility shall be brought into full compliance with this section.

NEW SECTION

WAC 16-229-025 Secondary containment of liquid bulk pesticides--Capacity. (1) The secondary containment facility shall contain at least one hundred twenty five percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances, and other items within the containment area.

(2) If the secondary containment facility is located indoors or under a roof to prevent accumulation of rainfall, the area shall contain at least one hundred ten percent of the volume of the largest storage container plus the displacement of all other tanks, appurtenances and other items within the containment area.

(3) Secondary containment facilities in operation prior to March 1, 1994, and which have a minimum capacity of one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances and

other items within the containment area shall be considered to be in compliance with this section: *Provided*, That upon alteration to the facility or increase of storage container volume the facility shall be brought into full compliance with the specific capacity requirements of this section.

NEW SECTION

WAC 16-229-030 Secondary containment of liquid bulk pesticides--Walls. (1) The walls of a secondary containment facility shall be constructed of steel, poured reinforced concrete, precast concrete modules, solid masonry, or other materials that will provide similar protection. The wall shall be designed to withstand a full hydrostatic head of any discharged liquid, and shall be properly sealed to prevent leakage.

(2) Any piping through the outside walls of a secondary containment facility shall be installed and maintained such that the structural integrity of the wall is preserved and in such a manner as to prevent leaks.

NEW SECTION

WAC 16-229-040 Secondary containment of liquid bulk pesticides--Lining. The base of a secondary containment facility shall be lined with steel, concrete or synthetic liner. The secondary containment floor shall slope to a liquid tight collection point or sump that allows spilled or deposited materials to be easily removed.

(1) Concrete liners: Concrete liners shall be designed according to good engineering practices to withstand any foreseeable loading conditions, including a full hydrostatic head of discharged liquid, and shall be properly sealed to prevent leakage.

(2) Synthetic liners:

(a) Synthetic liners shall be chemically compatible with the materials being stored within the facility and have a minimum thickness of 30 mils +/- 1 mil. A written confirmation of compatibility and a written estimate of the life of the liner from the manufacturer shall be kept on file at the storage facility or the nearest local office from which the facility is administered.

(b) Synthetic liners shall be installed under the supervision of a qualified representative of the manufacturer, a contractor certified by the manufacturer, or a certified engineer. All field constructed seams shall be tested, and repaired if necessary, in accordance with the manufacturers recommendations.

NEW SECTION

WAC 16-229-050 Secondary containment of liquid bulk pesticides--Prefabricated facilities. (1) A prefabricated facility shall be composed of a rigid prefabricated basin having both a base and walls constructed of steel or synthetic materials which are resistant to corrosion, puncture or cracking. Materials used in the facility shall be chemically compatible with the products being stored within the facility. A written confirmation of compatibility from the basin manufacturer shall be kept on file at the storage facility or at the nearest local office from which the storage facility is administered.

(2) The prefabricated facility shall be designed and installed to withstand all foreseeable loading conditions, including the tank load and a full hydrostatic head of any discharged liquid. Multiple basins connected to provide the capacity required in WAC 16-229-025 shall be connected in a manner which assures an adequate transfer of discharged liquid between basins.

NEW SECTION

WAC 16-229-060 Secondary containment of liquid bulk pesticides--Discharge outlets or valves. Secondary containment facilities, including prefabricated facilities, shall not have discharge outlets or valves. Discharge outlets or valves on existing facilities shall be sealed. Secondary containment facilities may be interconnected.

NEW SECTION

WAC 16-229-070 Secondary containment of liquid bulk pesticides--Storage with other commodities. (1) No other commodity except pesticide, pesticide rinsate, recovered pesticide discharges, or fertilizer rinsate may be stored within a pesticide secondary containment facility.

(2) A pesticide secondary containment facility may share a wall or portion of a wall, with a fertilizer secondary containment facility.

NEW SECTION

WAC 16-229-080 Secondary containment of liquid bulk pesticides--Precipitation accumulations. Precipitation may not be allowed to accumulate in a secondary containment facility to the point where it may tend to:

(1) Reduce the capacity of the facility below one hundred ten percent of the volume of the largest storage container within the area plus the displacement of all other tanks, appurtenances and other items within the containment area.

(2) Increase corrosion of storage containers or appurtenances.

(3) Impair the stability of storage containers.

NEW SECTION

WAC 16-229-090 Secondary containment of liquid bulk pesticides--Recovery of discharges. Discharges within a secondary containment facility shall be immediately recovered.

NEW SECTION

WAC 16-229-100 Primary containment of bulk liquid pesticides--Permanent storage facility. Permanent storage facility general requirements:

(1) Storage containers and appurtenances shall be constructed, installed and maintained so as to prevent the discharge of liquid pesticide.

(2) Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture or cracking.

(3) Materials used in the construction or repair of storage containers and appurtenances may not be of a type which react chemically or electrolytically with stored liquid pesticide in a way which may weaken the storage container or appurtenances, or create a risk of discharge.

(4) Metals used for valves, fittings and repairs on metal containers shall be compatible with the metals used in the construction of the storage container, so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances, or create a risk of discharge.

(5) Storage containers and appurtenances shall be designed to handle all operating stresses, taking into account static head, pressure build up from pumps and compressors, and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operations.

(6) Every pesticide storage container connection, except a safety relief valve connection, shall be equipped with a manual shut-off valve located on the storage container or at a distance from the storage container dictated by standard engineering practice.

(7) Appurtenances shall be adequately supported to prevent sagging and possible breakage because of gravity and other forces encountered in the ordinary course of operation.

(8) Pesticide storage containers and appurtenances shall be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles or objects.

(9) Tanks designed as underground storage tanks shall not be used as above ground storage tanks for pesticide unless they are designed and approved for above ground use or have been inspected and approved by a certified engineer. A record of the inspection and approval shall be maintained as a permanent record.

NEW SECTION

WAC 16-229-110 Primary containment of bulk liquid pesticides--Prohibition against underground storage. No person shall store liquid pesticide in an underground storage container or a lined pit. A watertight catch basin or sump used for the temporary collection of rinsate or runoff from transfer and loading areas is exempt from this section.

NEW SECTION

WAC 16-229-120 Primary containment of bulk liquid pesticides--Abandoned storage containers. (1) Storage containers used at a storage facility to hold liquid bulk pesticide or pesticide rinsate are considered abandoned if they have been out of service for more than six consecutive months because of a weakness or leak, or have been out of service for any reason for more than two years without an integrity test having been performed.

(2) Abandoned underground storage containers containing pesticides which meet the definition of hazardous substance underground storage tank system in chapter 173-360 WAC are subject to the applicable requirements in that chapter.

(3) Abandoned above ground storage containers shall be thoroughly cleaned. All hatches on the storage containers shall be secured and all valves or connections shall be severed or plugged with vents being left functional.

NEW SECTION

WAC 16-229-130 Primary containment of bulk liquid pesticides--Anchoring of storage containers. Storage containers shall be secured, as necessary, to prevent flotation or instability which might occur as a result of liquid accumulations within a secondary containment facility.

NEW SECTION

WAC 16-229-140 Primary containment of bulk liquid pesticides--Filling storage containers. Storage containers may not be filled beyond the capacity for which they are designed, taking into account the density of the liquid being stored and thermal expansion during storage.

NEW SECTION

WAC 16-229-150 Primary containment of bulk liquid pesticides--Liquid level gauging device. (1) Every storage container shall be equipped with a liquid level gauging device by which the level of liquid in the storage container can be readily and safely determined.

(2) A liquid level gauging device is not required if the level of liquid in a storage container can be reliably measured by other means.

(3) Liquid level gauging devices shall be secured, in a safe manner, to protect against breakage or vandalism which may result in a discharge.

(4) External sight gauges are prohibited unless they are equipped with an automatic shut-off valve.

NEW SECTION

WAC 16-229-160 Primary containment of bulk liquid pesticides--Venting requirements. Storage containers used for liquid bulk pesticide shall be equipped with a conservation vent which opens and closes within the designed pressure limits of the container.

NEW SECTION

WAC 16-229-170 Primary containment of bulk liquid pesticides--Security. All bulk pesticide storage containers and appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access. Valves on storage containers shall be closed and locked or otherwise secured when left unattended. Locks on end valves shall be considered adequate security for containers and appurtenances. For purposes of this section, unattended means there is no employee on the property for a period of twelve hours or longer.

NEW SECTION

WAC 16-229-180 Primary containment of bulk liquid pesticides--Labeling. (1) All bulk pesticide storage containers shall be labeled in accordance with the Washington Pesticide Control Act (chapter 15.58 RCW) and the Federal Insecticide, Fungicide and Rodenticide Act. The registered product label shall be attached to the bulk storage container in a prominent location. The label shall be designed to remain intact and legible through active use of the container.

(2) All bulk pesticide storage containers shall bear a label or placard in accordance with Uniform Fire Code Standard No. 79-3, identifying the materials therein.

(3) All bulk pesticide storage containers used for field storage shall be labeled with the owner's name, the capacity of the tank, and an identifying number. Lettering shall be a minimum of two inches in height and in a color contrasting to the background.

NEW SECTION

WAC 16-229-200 Primary containment of bulk liquid pesticides--Field storage. (1) Containers used for field storage of liquid bulk pesticide shall comply with the following sections: WAC 16-229-100, 16-229-110, 16-229-120, 16-229-140, 16-229-150, 16-229-160, and 16-229-180.

(2) All bulk pesticide storage containers and appurtenances used for field storage shall be inspected for leakage and soundness daily when in use.

(3) Valves on storage containers shall be closed and locked or otherwise secured when left unattended.

NEW SECTION

WAC 16-229-210 Operational area containment of liquid pesticides--Permanent storage facility. (1) All operational area activities shall take place on or within an operational area containment facility: *Provided*, That during the unloading or loading of railcars, marine vessels, or manned trucks when product is unloaded from direct shipments from manufacturers, individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) The operational area containment facility shall be designed and constructed to contain pesticides, rinsates, and other materials spilled or deposited during mixing, loading, unloading, draining, and rinsing activities.

(3) The operational area containment facility shall be constructed of concrete or other material with similar permeability.

(4) If synthetic materials are used in construction they shall be chemically compatible with the products handled at the site. A written confirmation of compatibility from the manufacturer shall be kept on file at the site or the nearest location from which the site is administered.

(5) The facility shall be constructed to withstand the weight of any vehicles or storage containers which will be on the facility.

(6) The facility shall be constructed with sufficient surface area, using curbs or other means, to prevent any discharge from leaving the containment area.

(7) The facility shall have a capacity of at least fifteen hundred gallons of containment. If no storage container or mobile storage container used at the facility to transfer liquid bulk pesticides has a capacity of more than one thousand gallons, the containment facility shall be of adequate size and design to contain one hundred twenty-five percent the capacity of the largest storage container, or mobile storage container used.

(8) The operational area containment facility shall slope to a liquid tight collection point or sump that allows spilled or deposited materials to be easily recovered. An above ground tank may be used in conjunction with the containment facility to meet the capacity requirement. If an above ground tank is used for temporary storage the tank shall be located within secondary containment. The tank shall be clearly and conspicuously labeled "pesticide rinsate" followed by the major category of pesticide such as insecticide, herbicide, fungicide.

(9) Any pump used for recovering material from the operational area containment facility shall be manually activated.

(10) The operational area containment facility shall not have a discharge outlet or valve. Discharge outlets or valves on existing facilities shall be sealed. Operational area containment facilities may be interconnected.

NEW SECTION

WAC 16-229-220 Operational area containment of liquid pesticides--Field storage. (1) During loading and unloading of liquid bulk pesticide at field storage locations individual basins or portable storage containers shall be used to recover spillage and leakage from transfer connections and pumps.

(2) Liquid bulk pesticide storage containers used for field storage shall be located at least one hundred feet from wells and surface water, except, for purposes of this section, irrigation water flowing directly to a field, or on a field, is not considered surface water unless the water could be carried beyond the field being irrigated.

NEW SECTION

WAC 16-229-230 Dry bulk pesticide storage and handling. (1) Dry bulk pesticides shall be stored in storage containers designed and constructed to hold dry bulk pesticide and shall be compatible with the stored pesticide. Storage containers shall be constructed of materials which are resistant to corrosion, puncture or cracking and shall be properly maintained.

(2) Dry bulk pesticide storage containers shall be placed on pallets or a raised platform which is drained.

(3) Stored dry bulk pesticide shall be covered by a roof or tarpaulin except during loading or unloading operations.

(4) All loading, unloading, mixing and handling of dry bulk pesticide at the storage facility shall be done on a paved surface of a size and design that will contain the pesticide and allow for collection of spilled materials.

(5) Any spills of dry bulk pesticide onto the containment area shall be promptly cleaned up and recovered.

NEW SECTION

WAC 16-229-240 Backflow prevention. (1) If plumbing within a secondary containment facility or an operational area facility is directly connected to a well or public water supply system a backflow prevention device shall be installed to protect the water source. All equipment shall be installed, operated and maintained per WAC 246-290-490 and manufacturer's recommendations. The minimum safety equipment shall be one of the following:

(a) A reduced pressure principle backflow prevention assembly approved by the Washington state department of health.

(b) Air gap separation. Air gap is a physical separation between the free flowing discharge end of a water supply line and the fill opening of a water storage tank. The end of the discharge pipe shall be located a distance of at least two times the diameter of the supply line measured vertically above the flood rim of the tank. The gap should be increased if the fill pipe is located next to a wall. If the discharge pipe is located within a secondary containment or operational area facility the end of the pipe shall be at least two pipe diameters above the highest liquid holding capacity of the containment facility.

(2) Reduced pressure principle backflow prevention assemblies shall be inspected and tested once per year and air gap systems shall be inspected once per year by a Washington state department of health certified backflow assembly tester pursuant to WAC 246-290-490.

NEW SECTION

WAC 16-229-250 Rinsate management. (1) Pesticide products, or rinsates spilled, or accumulated within a secondary or operational area facility, shall be immediately recovered. Any use of these materials shall be at labeled rates consistent with labeled end uses for the product(s). The materials may be stored for later use or as make-up water for pesticide applications.

(2) Any liquid that accumulates at a collection point or in a sump shall be removed within twenty-four hours when the facility is in operation.

(3) Recovered spills, sedimentation, rinsates, contaminated precipitation or other contaminated debris shall be contained and used per product label or properly disposed of. Pesticide containing materials shall not be released to the environment unless the release is an application per product label direction. Any disposal of these materials or captured washwater shall be consistent with the Hazardous Waste Management Act, chapter 70.105 RCW and the Water Pollution Control Act, chapter 90.48 RCW and shall be enforced by the Washington state department of ecology accordingly.

(4) If storage tanks are used to store rinsate, washwater or contaminated precipitation for later use the following records shall be kept.

(a) The date and amount of water put into the tank.

(b) The brand name(s) or active ingredient(s) of the pesticides contained in the water.

(c) A method to identify the specific application(s) it was used for.

NEW SECTION

WAC 16-229-260 Maintenance and inspection. (1) The operator of a pesticide bulk storage facility shall inspect and maintain storage containers, appurtenances, secondary containment facilities and operational area facilities to minimize the risk of a pesticide release. The inspection shall include a visual observation for any evidence of leaks, spills, cracks, solar decay or wear.

(2) Maintenance of the pesticide bulk storage facilities shall be performed as needed to ensure that the integrity of the bulk pesticide storage containers, secondary containment facilities and operational area containment facilities is maintained.

(3) Bulk pesticide storage containers and appurtenances shall be inspected at least once per month when in use. Secondary containment and operational area facilities shall be inspected at least once per month when in use.

(4) All secondary and operational area facilities shall be maintained free of debris and foreign matter.

(5) A written record of all inspections and maintenance shall be made on the day of the inspection or maintenance and kept at the storage site or at the nearest local office from which the storage site is administered.

(6) Inspection records shall contain the name of the person making the inspection, the date of the inspection, conditions noted and maintenance performed.

NEW SECTION

WAC 16-229-270 Recordkeeping requirements. The following records shall be maintained at pesticide bulk storage facilities or at the nearest local office from which the storage facility is administered:

(1) A record of construction materials and methods of construction to show compliance with WAC 16-229-025, 16-229-030, 16-229-040, 16-229-050, 16-229-060, and 16-229-210. These records shall be maintained as permanent records.

(2) A record of the method(s) used to use or dispose of product or contaminated materials recovered from discharges outside secondary or operational area containment facilities. This record applies only to discharges required to be reported to the Washington state department of ecology by the Washington state Dangerous waste regulations, chapter 173-303 WAC. These records shall be maintained for a period of at least three years.

(3) A monthly inventory reconciliation showing the amount of liquid bulk pesticide from each storage container which is lost or unaccounted for at the end of each monthly period during which pesticide is stored in the container. These records shall be maintained for a period of at least three years.

(4) Inspection and maintenance records required by WAC 16-229-260. These records shall be maintained for a period of at least three years.

(5) Manufacturer's compatibility statements required by WAC 16-229-040 and 16-229-050. These records shall be maintained as permanent records.

(6) A copy of the facility's spill response plan required by WAC 16-229-280. This record shall be maintained as a permanent document.

(7) Records required in WAC 16-229-250 for use or disposal of rinsate, washwater and contaminated precipitation. These records shall be maintained for a period of at least three years.

(8) Inspection records required by WAC 16-229-100(9). These records shall be maintained as permanent records.

(9) Records required by WAC 16-229-240, Backflow prevention.

NEW SECTION

WAC 16-229-280 Spill response plan. (1) The operator of a storage facility shall prepare a written spill response plan for the storage facility. If all or portions of the information required by the spill response plan have been prepared for plans required by other government agencies, they need not be prepared

for this plan: *Provided*, That the information is readily accessible to emergency responders and department personnel. However, when copies of the plan are distributed all the required information must be provided.

The plan shall include the following elements:

(a) The identity and telephone numbers of the persons and agencies who are to be contacted in the event of a spill including persons responsible for the stored pesticide.

(b) For each pesticide stored at the facility a complete copy of the storage container labeling required in WAC 16-229-180 and the labeling required to accompany sale of the pesticide under the Washington Pesticide Control Act, chapter 15.58 RCW.

(c) A material safety data sheet for each pesticide stored at the facility.

(d) The procedures to be used for controlling and recovering, or otherwise responding to a spill for each type of bulk pesticide stored at the facility.

(e) The procedures to be followed in using or disposing of a recovered spill.

(2) The spill response plan shall be kept current at all times.

(3) A copy of the spill response plan shall be kept readily available for inspection and use at the storage facility or at the nearest local office from which the storage facility is administered and shall be available for inspection and copying by the department.

(4) A copy of the spill response plan shall be provided to the local fire department.

(5) Persons employed at bulk pesticide storage facilities shall be trained in spill response procedures pursuant to the spill response plan.

(6) Emergency equipment and supplies: Every storage facility shall have access to pumps and recovery containers which can be used to control and recover spills. Pumps, recovery containers and persons capable of deploying and operating them shall be readily available in an emergency. Pumps and recovery containers may include those operated by a local fire department or other persons: *Provided*, That the use and availability of the pumps and recovery containers is arranged in advance as part of the spill response plan. Absorbent materials and other equipment suitable for the control and cleanup of smaller spills shall be available at the storage facility. The facility shall maintain a list showing the types and locations of clean-up supplies and equipment. The list shall be maintained at the storage facility or the nearest local office from which the facility is administered.

NEW SECTION

WAC 16-229-300 Compliance schedule. (1) New permanent storage facilities placed in service after March 1, 1994, shall immediately comply with this chapter.

(2) Existing permanent storage facilities in operation prior to March 1, 1994, shall comply with the following schedule:

- (a) Secondary containment
WAC 16-229-020 through 16-229-090,
except as otherwise provided
in WAC 16-229-025(3) three years after March 1, 1994
- (b) Primary containment
WAC 16-229-100 through
16-229-200 one year after March 1, 1994
- (c) Operational area
containment WAC 16-229-210 three years after March 1, 1994
- (d) Dry bulk pesticide
storage and handling WAC
16-229-230 (1), (2), (3),
and (5) one year after March 1, 1994
WAC 16-229-230(4) three years after March 1, 1994
- (e) Backflow prevention
WAC 16-229-240 immediate
- (f) Rinsate management
WAC 16-229-250 one year after March 1, 1994
- (g) Maintenance and inspection
WAC 16-229-260 one year after March 1, 1994
- (h) Recordkeeping requirements
WAC 16-229-270 one year after March 1, 1994
- (i) Spill response plan
WAC 16-229-280 one year after March 1, 1994.

NEW SECTION

WAC 16-229-310 Permits. (1) The department may issue a permit exempting any person from a requirement under Part 2 of this chapter if compliance is not technically feasible in the judgment of the department and the department finds that alternative measures provide substantially similar protection. All information required to prove that substantially similar protection is possible shall be provided to the department by the person requesting the permit.

(2) An advisory group appointed by the director shall evaluate and advise the department on all requests for permits from the rule.

**PART 3
PERMANENT MIXING/LOADING SITES**

NEW SECTION

WAC 16-229-400 Operational area containment at permanent mixing/loading sites. (1) All operational area activities occurring at a permanent mixing/loading site shall take place on or within an operational area containment facility.

(2) The operational area containment facility shall be designed and constructed to contain pesticides, rinsates, and other materials spilled or deposited during mixing, loading, unloading, draining, and rinsing activities.

(3) The operational area containment facility shall be constructed of concrete or other material with similar permeability. If synthetic materials are used in construction they shall be chemically compatible with the products mixed and loaded at the site. A written confirmation of compatibility from the manufacturer shall be kept on file at the site or the nearest location from which the site is administered.

(4) The facility shall be constructed to withstand the weight of any vehicles or storage containers which will be on the facility.

(5) The facility shall be constructed with sufficient surface area, using curbs or other means, to prevent any discharge from leaving the containment area.

(6) The containment facility shall be of adequate size and design to contain one hundred twenty-five percent the capacity of the largest storage container, or application equipment used at the facility up to a maximum of fifteen hundred gallons.

(7) Operational area facilities constructed prior to March 1, 1994, and which have been constructed to contain one hundred ten percent of the capacity of the largest storage container or application equipment used at the facility shall be considered to be in compliance with this chapter.

(8) The operational area containment facility shall slope to a liquid tight collection point or sump that allows spilled or deposited materials to be easily recovered. An above ground tank may be used in conjunction with the containment facility to meet the capacity requirement. If an above ground tank or tanks are used for temporary storage, the tank(s) shall be located within operational area or secondary containment. The tank shall be clearly and conspicuously labeled "pesticide rinsate" followed by the major category of pesticide such as insecticide, herbicide, fungicide.

(9) Any pump used for recovering material from the operational area containment facility shall be manually activated.

(10) The operational area containment facility shall not have a discharge outlet or valve. Discharge outlets or valves on existing facilities shall be sealed. Operational area containment facilities may be interconnected.

NEW SECTION

WAC 16-229-410 Backflow prevention. (1) If plumbing within a permanent mixing/loading site is directly connected to a well or public water supply system a backflow prevention device shall be installed to protect the water source. All equipment shall be installed, operated and maintained per WAC 246-290-490 and manufacturer's recommendations. The safety equipment shall be one of the following:

(a) A reduced pressure principle backflow prevention assembly approved by the Washington state department of health.

(b) Air gap separation. Air gap is a physical separation between the free flowing discharge end of a water supply line and the fill opening of a water storage tank. The end of the discharge pipe shall be located a distance of at least two times the diameter of the supply line measured vertically above the flood rim of the tank. The gap should be increased if the fill pipe is located next to a wall. If the discharge pipe is located within a secondary containment or operational area facility the end of the pipe shall be at least two pipe diameters above the highest liquid holding capacity of the containment facility.

(2) Reduced pressure principle backflow prevention assemblies shall be inspected and tested once per year and air gap systems shall be inspected once per year by a Washington state department of health certified backflow assembly tester pursuant to WAC 246-290-490.

NEW SECTION

WAC 16-229-420 Rinsate management. (1) Pesticide products or rinsates spilled or accumulated within an operational area containment facility shall be immediately recovered. Any use of these materials must be at labeled rates consistent with labeled end uses for the product(s). The materials may be stored for later use or as make-up water for pesticide applications.

(2) Any liquid that accumulates at a collection point or in a sump shall be removed within twenty-four hours when the facility is in operation.

(3) Recovered spills, sedimentation, rinsates, contaminated precipitation or other contaminated debris shall be contained and used per product label or properly disposed of. Pesticide containing materials shall not be released to the environment unless the release is an application per product label direction. Any disposal of these materials or captured washwater shall be consistent with the Hazardous Waste Management Act, chapter 70.105 RCW and the Water Pollution Control Act, chapter 90.48 RCW and shall be enforced by the Washington state department of ecology accordingly.

(4) If storage tanks are used to store rinsate, washwater or contaminated precipitation for later use the following records shall be kept.

(a) The date and amount of water put into the tank.

(b) The brand name(s) or active ingredient(s) of the pesticides contained in the water.

(c) A method to identify the specific application it was used for.

NEW SECTION

WAC 16-229-430 Maintenance and inspection. (1) The operator of a permanent mixing/loading site shall inspect and maintain storage containers, appurtenances, and operational area facilities to minimize the risk of a pesticide release. The inspection shall include a visual observation for any evidence of leaks, spills, cracks, solar decay or wear.

(2) Maintenance of the facilities shall be performed as needed to ensure that the integrity of the operational area containment facilities is maintained.

(3) Operational area facilities shall be inspected at least once per month when in use.

(4) Operational area facilities shall be maintained free of debris and foreign matter.

(5) A written record of all inspections and maintenance or repairs shall be made on the day of the inspection or maintenance and kept at the site or at the nearest local office from which the site is administered.

(6) Inspection records shall contain the name of the person making the inspection, the date of the inspection, conditions noted and maintenance performed.

NEW SECTION

WAC 16-229-440 Recordkeeping requirements. The following records shall be maintained at the permanent mixing/loading site or at the nearest local office from which the site is administered:

(1) A record of construction materials and methods of construction to show compliance with WAC 16-229-400. These records shall be maintained as permanent records.

(2) A record of the method(s) used to use or dispose of product or contaminated materials recovered from discharges outside the operational area containment facility. This record applies only to discharges required to be reported to the Washington state department of ecology by the Washington state Dangerous waste regulations, chapter 173-303 WAC. These records shall be maintained for a period of at least three years.

(3) Inspection and maintenance records required by WAC 16-229-430. These records shall be maintained for a period of at least three years.

(4) Manufacturer's compatibility statements required by WAC 16-229-400 if synthetic materials are used in the construction of

the facility. These records shall be maintained as permanent records.

(5) A copy of the spill response plan required in WAC 16-229-450. This record shall be maintained as a permanent document.

(6) Records required by WAC 16-229-420 for use or disposal of rinsate and contaminated precipitation. These records shall be maintained for a period of at least three years.

(7) Records required by WAC 16-229-240, Backflow prevention.

NEW SECTION

WAC 16-229-450 Spill response plan. (1) The operator of a permanent mixing/loading site shall prepare a written spill response plan for the facility. If all or portions of the information required by the spill response plan have been prepared for plans required by other government agencies they need not be prepared for this plan: *Provided*, That the information is readily accessible to emergency responders and department personnel. However, when copies of the plan are distributed all the required information shall be provided.

The plan shall include the following elements:

(a) The identity and telephone numbers of the persons and agencies who are to be contacted in the event of a spill.

(b) For each pesticide stored at the facility a complete copy of the storage container labeling required under this rule and the labeling required to accompany sale of the pesticide under the Washington Pesticide Control Act, chapter 15.58 RCW.

(c) A material safety data sheet for each pesticide stored at the facility.

(d) The procedures to be used for controlling and recovering, or otherwise responding to a spill for each type of pesticide stored at the facility.

(e) The procedures to be followed in using or disposing of a recovered spill.

(2) The spill response plan shall be kept current at all times.

(3) A copy of the spill response plan shall be kept readily available for inspection and use at the facility or at the nearest local office from which the facility is administered and shall be available for inspection and copying by the department.

(4) Persons employed at permanent mixing/loading sites shall be trained in spill response procedures pursuant to the spill response plan.

(5) Emergency equipment and supplies: Absorbent materials and other equipment suitable for the control and cleanup of smaller spills shall be available at the facility. A list showing the types and locations of clean-up supplies and equipment shall be maintained at the permanent mixing/loading site or the nearest local office from which the site is administered.

NEW SECTION

WAC 16-229-470 Compliance. (1) New permanent mixing/loading sites placed in service after March 1, 1994, shall immediately comply with this chapter.

(2) Existing permanent mixing/loading sites in operation prior to March 1, 1994, shall have four years from March 1, 1994, to be in full compliance.

NEW SECTION

WAC 16-229-480 Permits. (1) The department may issue a permit exempting any person from a requirement under Part 3 of this chapter if compliance is not technically feasible in the judgment of the department and the department finds that alternative measures provide substantially similar protection. All information required to prove that substantially similar protection is possible shall be provided to the department by the person requesting the permit.

(2) An advisory group appointed by the director shall evaluate and advise the department on all requests for permits from this chapter.