MINNESOTA DEPARTMENT OF AGRICULTURE
625 Robert St. N., St. Paul, MN 55155-2538
www.mda.state.mn.us
Pesticide & Fertilizer Management Division, Ph. 651-201-6274
Minn. Stat. Sec.18C.305

BULK PESTICIDE/FERTILIZER STORAGE - SUBSTANTIAL ALTERATION FOR EXISTING PERMIT NUMBER: _____

The data on this form will be used to process your application. You must provide your Minnesota Tax ID number. If you do not have one, you must provide your social security number (MS Sec 270C.72). We are required by law to collect this information and we cannot grant your license without it. No one will have access to your social security number except those permitted access by law, your written consent, court order, or those department employees whose job duties require access. Pursuant to MS Sec 297A.66 if your company maintains within the state an office or place of distribution or sales person or other employee that solicits, sells or delivers goods or services in the state you must have a Minnesota Tax ID number. If you are unsure if you need a Minnesota Tax ID, contact the Minnesota Department of Revenue at www.taxes.state.mn.us.

Does your company maintain within the state an office or place of distribution or sales person or other employee that solicits, sells or delivers goods or services in the state? Yes __ or No__. If yes, enter MN Tax ID number in the space provided below .

Legal Company Name:			**MN Tax ID or if none, Social Security Number:**		
DBA (if different):			Mailing Address (if different):		
Physical (911) Address of Proposed Permit Site (No PO Box):			City:	State:	Zip Code:
City:	State:	Zip Code:	Company Telephone:		
County:			Contact Person:		

	Township Name	Township Designation	Range Designation	Section	1/4 of 1/4 Section
Legal Description					

Substantial Alteration: Constructing new or changing the capacity of a safeguard at an existing permitted site increasing the size of the largest storage container in a safeguard, or adding storage containers in excess of the capacity of a safeguard as required by MN Statutes 18B and 18C.

Permit Fees:

Substantial Alteration Performed (Check all that apply): **$50.00**

- ☐ Adding additional bulk liquid/dry pesticide secondary containment **600326(3100)**
- ☐ Adding additional bulk liquid/dry pesticide tanks to existing permitted safeguard **600326(3100)**
- ☐ Adding additional bulk liquid/dry fertilizer secondary containment **600290(3100)**
- ☐ Adding additional bulk liquid/dry fertilizer tanks to existing permitted safeguard **600290(3100)**
- ☐ Adding both bulk liquid/dry pesticide/fertilizer secondary containment/tanks to existing permit. (Combination) **600326(3100)**

Please provide brief description of proposed construction/changes noted above:

_____

_____

Penalty Fee (if applicable): **$250.00**

Penalty for constructing/substantially altering a bulk pesticide/fertilizer storage facility without a permit.

- ☐ Adding pesticide secondary containment or tank without a permit **600326(3510)**
- ☐ Adding fertilizer secondary containment or tank without a permit **600290(3510)**
- ☐ Adding both pesticide & fertilizer containment and/or tank without a permit **600326(3510)**

Return this form with your check made payable to:
MINNESOTA DEPARTMENT OF AGRICULTURE
Attn: Cashier
625 Robert Street North
Saint Paul, MN 55155-2538
Licenses are not transferable and fees are not refundable.

TOTAL DUE: $_____

I hereby certify that the information contained in and submitted with this form is true and correct.

Signature: _____ Date: _____

Name (Please print): _____ Title: _____

Contact Telephone: _____ Fax Number: _____

E-mail Address: _____

For Office Use Only

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Submit the Following Information With This Substantial Alteration Permit Application

A permit cannot be issued without this information.

It is a violation of MN Statutes 18B and 18C for a person to construct new safeguards or substantially alter an existing permitted safeguard at a Bulk Ag Chemical Storage Facility. If discovered that a firm is in violation of these statutes they may receive ORDERS from the Minnesota Department of Agriculture (MDA) to Cease & Desist all construction activity until a permit has been granted by the MDA along with possible enforcement action.

1. **Provide facility EPA Establishment Number if permit application involves construction of a new Bulk Pesticide Facility.**

EPA Establishment Number: _____

☐ Check if permit application is for Bulk Fertilizer Only

2. **Name of contractor(s) or company involved in constructing or installing this safeguard:**

Contractor Name:	Address:	Telephone:

3. **Provide a copy of a local permit letter of authorization required by any local unit of government (city, county, etc) for new construction being proposed.**

☐ Check if building permit is not currently available, but will be submitted prior to construction

☐ Check if no local building permit or authorization is required for this proposed construction

4. **Facility Map/Diagram**

Map/diagram of your facility property that clearly outlines your property boundaries and shows the location of the new proposed facility/safeguard. (This map is separate from the quarter mile and should include all the following information):

**Maps should indicate north, south, east and west directions and should also be close to scale.*

A. Indicate clearly on the facility map the correct property boundaries.

B. Label and show all buildings and vehicle parking areas on the facility property.

C. Indicate and label all current pesticide/fertilizer storage areas. Also label all areas where mixing and loading have occurred.

D. Indicate where all storm sewer inlets and tile inlets and outlets are located on the property.

E. Show location of all wells located on the property and indicate distance from the proposed new safeguard.

Are there any wells within 150 feet of the proposed safeguard (dike, dry storage bins, load pad areas)? ☐ Yes ☐ No

5. **If Substantial Alteration includes construction of new safegaurds: Provide construction drawings/plans (to scale) for each of the proposed safeguards.**

Plans must include material and design specifications for each area. Plans must also include dimensions and cross-section details that specifically show how the safeguard will be constructed and made water tight. Drawings must include details that show how all floor, wall/floor and wall joints will be constructed. (Indicate all specific waterstops and sealants that will be used).

- *Do not submit an application without detailed construction plans that show how the safeguard will be built.*
- *Do not begin construction on the safeguard until a permit has been granted by the MDA.*

6. **If changing and/or adding tanks/bins, provide information for new tanks/bins along with all other remaining tanks/bins currently listed on your permit.**

(See page #3) – Completely fill out all required information for tank(s)/bin(s) being added. Tank information is located on the top of the page while bin information is located on the bottom. You may use more than one page if necessary.

7. **Provide calculations for all proposed secondary containment safeguards being proposed.**

(See pages #4 and #5) – Calculations will determine/compare required and provided capacity of proposed secondary containment systems for bulk liquid storage. These pages are not required to be filled out for dry bulk storage of pesticide or fertilizer.

8. **If permit application includes adding or changing tanks provide an overhead plumbing diagram which specifies locations, composition, diameter, and types of plumbing. Diagram should include: All tanks, valves, piping/hoses, pumps, meters, and scales.**

Are all wetted parts from the tank outlet to and including the first valve (including bung, nipples, and all plugs) stainless steel? ☐ Yes ☐ No

(This is a requirement for all pesticide tanks and is strongly recommended for all fertilizer tanks.)

9. **Soils Information (when substantially altering an existing permitted location):**

- NOTE: Additional soil information will only be required for larger construction projects such as dry bulk fertilizer bins and field erected bulk ag chemical tanks, MDA may require a complete geotechnical site investigation prior to permitting if substantial alteration includes one of the listed larger construction projects.
- **Also, be aware that when constructing on sites that were previously used for ag chemical storing, mixing/loading, or used as parking areas it is strongly recommended (and may be required) to conduct preconstruction soil sampling of the area prior to construction. If your site may fit this description it is best to call the Incident Response Unit @ (651) 201-6268 to discuss your specific situation prior to submitting the permit application.**

10. **A release response plan is required under Minnesota Rules Part 1505.3100. This plan does not have to be submitted to the Minnesota Department of Agriculture with the permit application, but applicant must have one and it must be maintained and updated. (See MDA's website for suggested format for an Incident Response Plan.)**

Is your firm's release response plan in place and up-to-date? ❑ Yes ❑ No

(Information in your firm's release response plan must be updated to include details related to the substantial alteration you are currently applying for.)

The minimum required information in a release response plan is as follows:

A. The identity and telephone numbers of the persons who are to be contacted in the event of an agricultural chemical release, including owners (responsible persons), managers, employees, and government agencies.

B. A complete copy of each bulk pesticide label.

C. A complete copy of the Material Safety Data Sheet (MSDS) for each bulk pesticide stored at the facility.

D. The procedures and equipment to be used in abating and recovering a pesticide release.

E. The general location where any bulk pesticide container is stored at the facility.

11. **Markings/Signage Requirements**

Facilities that store bulk liquid/dry fertilizer are required under Minnesota Rules Part 1510.0377 and Part 1510.0405:

A. To have containers properly labeled with appropriate grade or guaranteed analysis of the contents of the storage container.

B. An identification sign displayed in a clearly legible and conspicuous manner stating the name, address, and telephone number of the nearest agent, representative, owner, or person who operates the facility.

C. An incident notification sign must be posted in a conspicuous place within the facility.

Does this application include storage of bulk liquid or dry fertilizer? ❑ Yes ❑ No

If yes, will your company have all the required signage requirements in place prior to storing bulk fertilizer? ❑ Yes ❑ No

12. **For new proposed dry bulk fertilizer facilities:**

Will there be pesticide impregnation done in the new facility? ❑ Yes ❑ No

If No, you are done with this section.

If Yes, will firm impregnate dry fertilizer using minibulk containers (56 gallons - 499 gallons in size)? ❑ Yes ❑ No

If Yes to using minibulk containers explain how minibulk tank(s) and inductor will be safeguarded.

If No to using minibulk containers but yes to impregnating, explain how firm plans to impregnate fertilizer at their facility:

Attachment 1 (Reference Section 7) **Pesticide and/or Fertilizer Tank/Bin Data**

Liquid Storage Tank Data List all tanks within the dike(s), including water, rinsate, surfactant, fuel tanks, etc.

Dike No.[1]	Type of Dike[2]	Dike Material[3]	Roofed/ Unroofed	Tank No.	Tank Capacity	Unit of Measurement[4]	Tank Dimensions[5]	Vert./ Horiz.	Tank is Made of[6]	Cone/ Flat Bottom	Ht. Floor to Cone	External Sight Gauge[7]	Tank Age (Years)	Product Stored[8]	Previous Product Stored

[1]Dike number must correspond to facility map.

[2]Pesticide Dike, Fertilizer Dike, Combination Pesticide/Fertilizer Dike, Combination Dike/Load Area.

[3]Concrete, Metal, Poly, Synthetic, Masonry.

[4]Gallons, Tons, Cubic Feet.

[5]List in feet (i.e. 6'4" = 6.33 feet). List diameter, height, and length. Height of tank = height from floor to top of tank (not from bottom of cone to top of tank).

[6]Mild Steel, Stainless Steel, Poly.

[7]Yes or No.

[8]Product Name (i.e. Harness, Roundup, Dual, 28-0-0, Water, Rinsate, Surfactant, Fuel).

Dry Storage Tank/Bin Data

Dike No.	Type of Tank/Bin[1]	Roofed/ Unroofed	Tank/Bin No.	Unit of Measurement[2]	Tank/Bin Dimensions[3]	Vert./Horiz.[4]	Tank/Bin is Made of[5]	Product Stored

[1]Dry Bulk Pesticide Tank, Dry Bulk Fertilizer Bin, Dry Bulk Fertilizer

[2]Tons, Cubic Feet.

[3]List in feet (i.e. 6'4" = 6.33 feet). List diameter/width, height, and length.

[4]Vertical = tank storage, Horizontal = bin storage.

[5]Mild Steel, Concrete, Concrete/Wood.

Note: For substantial alteration permit applications, include new tank/bin information and all other remaining tanks/bins within the containment area.

Attachment 2 (Reference Section 8)

Secondary Containment Calculations

(Return all of this information, if applicable, with the permit application.)

* Use tank information from Section 7 (Attachment 1).

** Convert all dimensions to feet (i.e. 6'4" = 6.33').

*** All capacities are in gallons.

CALCULATIONS FOR CONTAINMENT REQUIRED

1. Dike Number _____ (Use a separate calculation sheet for each dike.)

2. Multiply the capacity (gallons) of the largest tank (pesticide, fertlizer, water, rinsate, etc.) in the secondary containment area by 1.25 (unroofed) or 1.1 (roofed).

   Largest tank capacity (Tank #_____): _____ gallons x _____[1.25 (unroofed) or 1.1 (roofed)] = _____

3. Vertical tank displacement (gallons).

   NOTE: Cone bottom tanks whose outlet is above the height of a dike wall do not need to be calculated.

   Tank 2 diam_____ ft. x Tank 2 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 2 = _____

   Tank 3 diam_____ ft. x Tank 3 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 3 = _____

   Tank 4 diam_____ ft. x Tank 4 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 4 = _____

   Tank 5 diam_____ ft. x Tank 5 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 5 = _____

   Tank 6 diam_____ ft. x Tank 6 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 6 = _____

   Tank 7 diam_____ ft. x Tank 7 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 7 = _____

   Tank 8 diam_____ ft. x Tank 8 diam_____ ft. x .785 x dike wall ht _____ ft. x 7.48 =
   Total gallons displacement for Tank 8 = _____

   Add total gallons of vertical tank displacement (Tanks 2-8) = _____
   (Vert. Tank Displ.)

4. Horizontal tank (round) displacement (gallons).

   Tank 2 Dike Wall Ht. (_____ ft.) / Tank Diam. (_____ ft.) = _____ = _____ conversion factor (from the chart below)
   Tank 2 capacity (gallons) _____ x _____ conversion factor = Tank 2 Displacement (gallons): _____

   Tank 3 Dike Wall Ht. (_____ ft.) / Tank Diam. (_____ ft.) = _____ = _____ conversion factor (from the chart below)
   Tank 3 capacity (gallons) _____ x _____ conversion factor = Tank 3 Displacement (gallons): _____

   Add total gallons of horizontal (round) tank displacement (Tanks 2-3) = _____
   (Horiz. Tank Displ.)

CONVERSION FACTORS

Dike Wall Ht. (ft.) + Tank Diameter (ft.)	Conversion Factor	Dike Wall Ht. (ft.) + Tank Diameter (ft.)	Conversion Factor	Dike Wall Ht. (ft.) + Tank Diameter (ft.)	Conversion Factor	Dike Wall Ht. (ft.) + Tank Diameter (ft.)	Conversion Factor
.01	.0017	.26	.2066	.51	.5127	.76	.8155
.02	.0048	.27	.2178	.52	.5255	.77	.8262
.03	.0087	.28	.2292	.53	.5382	.78	.8369
.04	.0134	.29	.2407	.54	.5509	.79	.8473
.05	.0187	.30	.2523	.55	.5636	.80	.8576
.06	.0245	.31	.2640	.56	.5762	.81	.8677
.07	.0308	.32	.2759	.57	.5888	.82	.8776
.08	.0375	.33	.2878	.58	.6014	.83	.8873
.09	.0446	.34	.2998	.59	.6265	.84	.8967
.10	.0520	.35	.3119	.60	.6389	.85	.9059
.11	.0598	.36	.3241	.61	.6513	.86	.9149
.12	.0680	.37	.3364	.62	.6636	.87	.9236
.13	.0754	.38	.3487	.63	.6759	.88	.9320
.14	.0851	.39	.3611	.64	.6881	.89	.9402
.15	.0941	.40	.3735	.65	.7002	.90	.9480
.16	.1033	.41	.3860	.66	.7122	.91	.9554
.17	.1127	.42	.3986	.67	.7241	.92	.9625
.18	.1224	.43	.4112	.68	.7360	.93	.9692
.19	.1323	.44	.4238	.69	.7477	.94	.9755
.20	.1424	.45	.4364	.70	.7593	.95	.9813
.21	.1527	.46	.4491	.71	.7708	.96	.9866
.22	.1631	.47	.4618	.72	.7822	.97	.9913
.23	.1733	.48	.4745	.73	.7934	.98	.9952
.24	.1845	.49	.4873	.74	.8450	.99	.9983
.25	.1955	.50	.5000	.75		1.00	1.0000

5. Enter the totals from sections 2,3, and 4 below. Add totals together and enter that total in the total Containment Required space provided:

2. Largest tank capacity x 1.25 or 1.1 _____
3. Total vertical tank displacement _____
4. Total horizontal (round) tank displacement _____
5. Other displacement (overburden, etc.) _____
6. Add 1,000 gallons for combination dike/load pad _____

TOTAL CONTAINMENT REQUIRED = _____

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6. Calculate the amount of containment (gallons) for the secondary containment:

Interior length_____ft. x Interior width_____ft. x wall height_____ft. x 7.48

TOTAL CONTAINMENT PROVIDED = _____

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7. If the Total Containment Provided figure in section 6 above is greater than the Total Containment Required figure from section 5 above, your secondary containment area is adequate. No further work is needed.

If the Total Containment Provided figure in section 6 above is less than the Total Containment Required figure from section 5, you must:

A. Increase wall height or increase interior dimensions and

B. Recalculate section 6 above, which must equal or exceed the Total Containment Required from section 5.

Bulk Pesticide/Fertilizer Liquid Loading Area Calculations

(Return all this information with the permit application if a new load pad is being proposed and is separate from containment dike above.)

8. Load Area # _____ (Use a separate sheet for each load area.)

9. A. Length_____ft. x width _____ft. x average dept _____ft. x 7.48

(Loading areas must be curbed 3" in height at the perimeter.)

B. Length_____ft. x width _____ft. x average dept _____ft. x 7.48

C. Add the end figure from A and B above. Enter total loading ara containment gallons here:

D. Bulk pesticide liquid load pad containment requirements:

(1) Containers of 500 U.S. gallons or more = Minimum capacity of 1000 gallons.
(2) Containers of 250 - 500 U.S. gallons = Minimum capacity of 500 gallons.
(3) Containers of less than 250 U.S. gallons = Minimum capacity of 250 gallons.

Enter the appropriate minimum capacity figure here:

E. Compare the appropriate figure listed in D with the figure in C. If C is less than D:

(1) Increase average depth of loading area or

(2) Increase dimensions of loading area and

(3) **Recalculate A or B, so that the total equals or exceeds D.**