



Minnesota Department of Agriculture Permitting Efficiency and Goal Report

Bulk Agricultural Chemical Storage, Anhydrous Ammonia Storage and Chemigation Permits



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Introduction

The need to protect the environment from agricultural chemical contamination has been recognized by the Minnesota legislature since the late 1970s. Rules for the storage of dry and liquid bulk fertilizer were adopted by the MDA in the 1970s. Significant amendments to the Minnesota Pesticide Control Law (M.S. 18B) and the Fertilizer, Soil Amendment and Plant Amendment (M.S. 18C) occurred in 1989 with the adoption of the Minnesota Groundwater Act and the subsequent Minnesota Rules, parts 1505, 1510, and 1513 that were adopted by the MDA in the early 1990s.

Statute require a responsible person to obtain a permit from the MDA before storing agricultural chemicals or chemigation. Rules adopted under statute provide technical, performance-based requirements for compliance.

The MDA is the lead agency charged with protecting people and the environment by ensuring agricultural chemicals are managed responsibly. The required safeguards for each permitting program are an important part of the MDA's mission to protect the environment and human health.

The MDA strives to issue permits in the least amount of time necessary while ensuring that environmental protections comply with the rules and statutory requirements.

Background

Bulk Agricultural Chemicals

The MDA operates the bulk agricultural chemical permitting program with 1.5 Full Time Equivalent (FTE) employee and a 0.2 FTE administrative assistant. The MDA has standardized the permit application process to eliminate unnecessary and duplicative forms. Once a permit application is received with the required one-time fee, (\$100 for a new site and \$50 for a substantial alteration of an existing site), the permit application is reviewed for completeness and the responsible person is informed of any needed changes.

In some instances, construction drawings are either absent or lack sufficient detail to make an approval determination. These drawings are required to insure that construction will protect the environment if a release of agricultural chemicals occurs. There is no engineering requirement; however, in certain instances the MDA requires that a civil engineer be consulted to address complex structural and foundation issues.

A new permit application and fee must be submitted when a storage facility will be constructed or there is a change in ownership. A substantial alteration permit application must be submitted when a larger tank will be installed, a new containment area is being added to an existing permit, or the size of an existing containment area or load pad will change. The MDA reviews the old permit and the new permit and then informs the responsible person of any additional information necessary for permitting.

All application forms are available online but applicants must submit a hard copy to the MDA.

Anhydrous Ammonia

The operation of the MDA's anhydrous ammonia program utilizes a staff level of 2.5 FTEs. An applicant must submit a hard copy of a permit application with a one-time application fee of \$100 for a new facility or a change in ownership, or \$50 application fee for a substantial alteration of an existing facility.

Applicants must submit a hard copy of the application along with the required application fee. MDA staff review all applications and will contact the applicant if additional information is needed. A permit will be issued after all applicable requirements stated in statutes and rules are met.

Chemigation

The MDA operates its chemigation permitting program with a 0.2 FTE administrative assistant and a 0.2 FTE technical staff.

Once a completed permit application is received, either online or as a hard copy, with the required one-time fee of \$250 (pesticides, fertilizer and pesticide) or \$50 (fertilizer only), a permit is granted. The MDA notifies the applicant by phone or letter when a permit application is incomplete. Common omissions include: the agricultural chemical information such as the fertilizer guaranteed analysis, the location of the pivot, Minnesota Department of Natural Resources water appropriation permit number, and the required fees.

A new operator at an existing permitted location must obtain a new permit. The result is multiple permits for multiple operators at one physical location. The person operating the system is responsible for obtaining the permit and complying with all regulatory requirements. The permit application, fee, and certification can be applied for online at the MDA website, <http://www.mda.state.mn.us>, or by hard copy.

2018 Activity

The Minnesota Department of Agriculture (MDA) issues three types of permits that fall under the reporting requirements of Minnesota Statutes, Chapter 17.03, Subd. 11a, b., titled "Permitting efficiency goal and report" and requires, in part, that "environmental and resource management permits be issued or denied within 150 days of the submission of a completed permit application." These permits are for 1) bulk agricultural chemical (fertilizer and pesticide) storage, 2) bulk anhydrous ammonia storage, and 3) chemigation. Anhydrous ammonia is a nitrogen fertilizer, and is a liquid under pressure. Due to its hazardous properties and storage rule requirements, the anhydrous ammonia permitting program is separate from the bulk agricultural chemical storage permitting process.

In 2018, there were 679 bulk agricultural chemical storage permits, 250 bulk anhydrous ammonia storage permits, and 3123 chemigation permits.

The first time cost for a new bulk agricultural chemical storage permit or an anhydrous ammonia permit is \$100.00. When a facility substantially alters an existing permit (i.e., adds a new, larger tank or changes the size or structure of the secondary containment), the cost is \$50.00. The one-time fee for a chemigation permit is \$250.00 for application of pesticide, or pesticide and fertilizer; or \$50.00 for fertilizer, only.

The average time it took to obtain a permit for bulk agricultural chemical storage or for anhydrous ammonia storage from the Minnesota Department of Agriculture this past year (January 1, 2018 to December 30, 2018) was ten days or less once all applicable requirements stated in statutes and rules were met. The chemigation permit issuance time is immediate due to the permit-by-rule status. A chemigation permit is issued automatically when a complete chemigation permit application and fee are submitted to the MDA.

1) Bulk Agricultural Chemicals

Permits are required for the storage of bulk agricultural chemicals per Minnesota Statutes, Chapters 18B.14 (pesticide), and 18C.305 (fertilizer). The MDA is required per 18B.14, Subd. 2, to issue bulk pesticide storage permits within 30 days after a completed application is received. A permit is not required for growers who store 6,000 gallons or less of liquid fertilizer on their property and for their own use under 18C.305, Subd. 3.

From January 1, 2018 to December 31, 2018, the MDA received 22 new and 27 substantial alteration permit applications and issued a total of 49 permits. Thirteen of the newly issued permits were due to ownership changes. The average time from the MDA's receipt of a completed application to issuance was four days.

2) Anhydrous Ammonia

Permits are required for the storage of anhydrous ammonia under Minnesota Statutes, Chapter 18C.305. From January 1, 2018 to December 31, 2018 the MDA received seven new permit applications for change of ownership, and four substantial alteration permit applications. The average time from receipt of a completed application to issuance was ten days. A new permit is required when a facility is built or if there is an ownership

change. A substantial alteration permit is required when a bulk anhydrous ammonia storage tank and loading/unloading stations are installed, moved, or the capacity of safeguards is changed.

3) Chemigation

Permits are required for the application of agricultural chemicals through irrigation systems under Minnesota Statute Chapter 18B.08 (pesticide) and Minnesota Statute Chapter 18C.205 (fertilizer).

The MDA’s chemigation permitting program operates under “permit-by-rule” which allows a person to apply fertilizer and pesticide through irrigation systems provided they submit a complete and accurate permit application, pay the required fee to the MDA, and certify by signature that they have complied with all rule requirements.

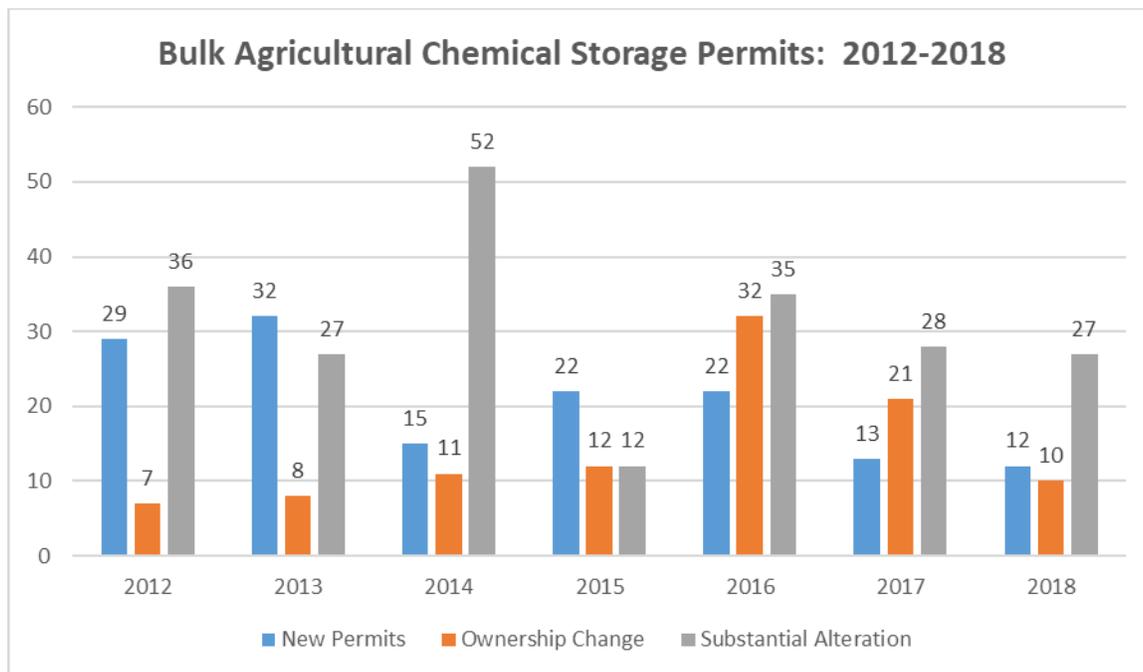
From January 1, 2018 to December 31, 2018, the MDA received 86 permit applications: 82 were for fertilizer only and four (4) were for pesticides and fertilizers.

Several factors enable the MDA to provide prompt turn-around time on the three types of permits listed above. Experienced MDA staff offer substantial compliance assistance to applicants. The exchange of information with applicants and contractors prior to submission of their permit application makes the process more efficient. When completed permit applications are submitted with all required information, the MDA is able to complete the final review and issue the permit in an informed and timely manner.

Trends

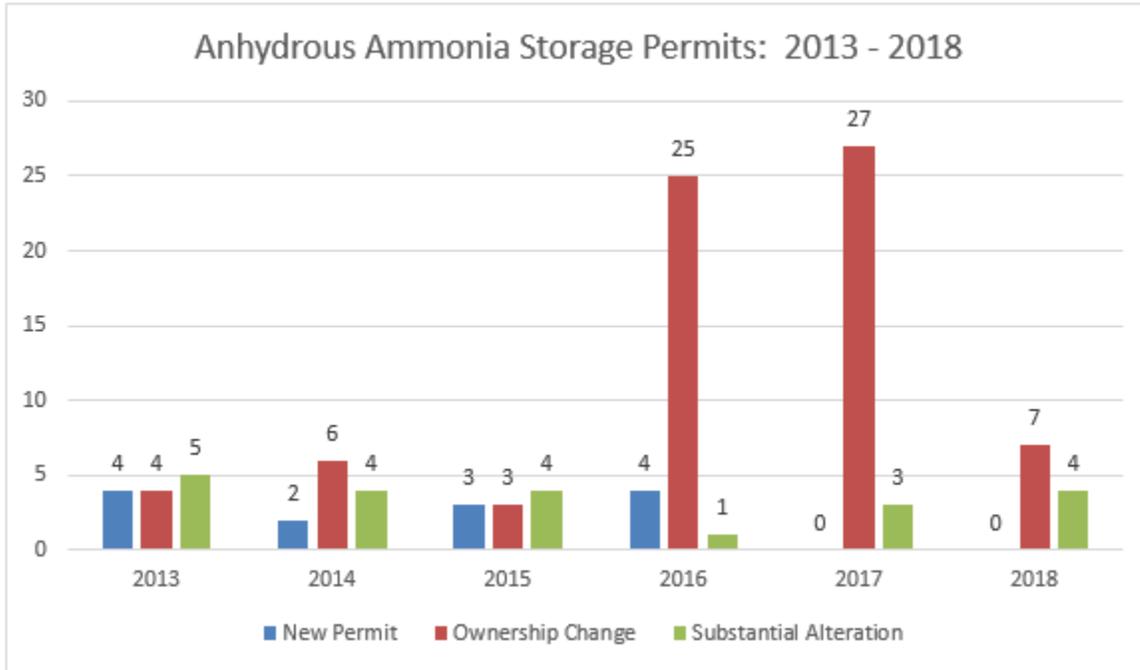
Bulk Agricultural Chemicals

The MDA continues to see larger facilities being built and existing facilities substantially altered to allow for increased storage capacity of both liquid and dry agricultural chemicals. These expanding facilities utilize increasingly complex mechanical equipment, technology, and construction techniques. Industry consolidations and ownership changes have been trending higher as facilities become larger. The MDA anticipates fewer but larger and more complex facilities in the future as firms merge and consolidate



Anhydrous Ammonia

The MDA is aware of consolidations and contraction of the fertilizer supply industry. The trend to consolidate is likely in response to the cost of maintaining and purchasing equipment and bulk storage tank systems, the cost of anhydrous ammonia versus alternate sources of nitrogen, a limited labor force, and safety concerns relating to handling anhydrous ammonia. The MDA anticipates the continued consolidation of facilities as firms merge.



Chemigation

The graph below shows the number of chemigation permits issued per year from 2004 to 2018, with a spike in permits issued between 2014 and 2017. The increase may have been due to several factors, including but not limited to changes in economic and agronomic conditions which favor capital expenditures and targeted nitrogen applications.

