

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

LIST OF ATTACHED DOCUMENTS

A. Rules as Adopted (original and three copies). Each copy reflects any amendments made in the rules since original publication.

B. Order Adopting the Rules (two copies).

C. Notice of Intent to Solicit Outside Opinion (one copy).

D. Order for Hearing (one copy).

E. Notice of Hearing (one copy).

F. Affidavit of Mailing Notice of Hearing (one copy).

G. Affidavit of Additional Notice (one copy).

H. Mailing List Certificate (one copy).

I. Rules as Proposed (one copy of each).

J. Hearing Examiner's Report (one copy).

K. Chief Hearing Examiner's Report (one copy).

L. Agency's Findings of Fact and Conclusions (one copy).

M. Order of the Chief Hearing Examiner.

N. Statement of Need and Reasonableness (one copy).

O. Record of Hearing.

P. Certificate of Compliance with Rulemaking Procedures (one copy).

Our File No. 915

RULE REVIEW CHECKLIST

DATE RULE RECEIVED 5-12-83
DATE FOR REVIEW 5-23-83
DATE DUE 6-1-83

Adopted w/a hearing ✓
Adopted w/o hearing _____
Temporary rule _____

Approved _____ Disapproved _____ Returned to Agency _____

Resubmitted _____ Due _____
Approved _____ Disapproved _____ Returned to Agency _____

Date filed w/Secretary of State _____ Revisor approved 5.12.83 disapproved _____

✓ Rule as Adopted

✓ Rule as Proposed see SR.

✓ Order Adopting 4.18.83 Date

✓ Notice of Intent to Solicit Outside Opinion SR 1.21.80, 5.12.80 + comments in response to previous Notice

✓ Order for rulemaking
12.21.82 date of Hearing

N/A Certificate of Board's Authorizing Resolution

✓ Notice of rulemaking
✓ Sufficiency

✓ Affidavit of Mailing Notice or rulemaking
11.12.82 At least 30 days prior to hearing/~~adoption~~
✓ Affidavit of Additional Notice

✓ Mailing list Certificate

✓ Publication in State Register
11.15.82 At least 30/~~20~~ days prior to hearing/~~adoption~~

✓ Hearing Examiner's Report

Chief Hearing Examiner's Report(s)
✓ 1.13.83 Approving H.E.'s Report
✓ 4.20.83 Approving agency action

✓ Agency's Findings of Fact

N/A LCRAR Report or agency Affidavit

N/A Certificate of Board's Resolution Adopting Rules

✓ Order Approving Incorporation by Reference

✓ Statement of Need and Reasonableness - separate statements for each rule.

N/A Petition for Adoption of a Rule

✓ Record (includes transcript or tape, exhibits, comments received by agency, requests for a hearing, and other relevant materials)

✓ Certificate of Compliance w/Rulemaking Procedures

N/A Affidavit of Mailing Notice of Submission to Attorney General

✓ Notice of Submission to the Attorney General

SF-00006-02

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : Jim Nichols, Commissioner of Agriculture DATE: June 1, 1983

Attn: JON MURPHY
Special Assistant Attorney General

FROM : TED A. MARTINEZ TAM PHONE: 296-4692
Special Assistant
Attorney General

SUBJECT: In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325 - 1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328).

Enclosed herewith are the rules you have submitted for approval. These rules have been approved by this office and filed with the Secretary of State. Please note that they have not been filed with the State Register. This must be done promptly by your agency.

Upon receipt and before transmittal to your agency, however, it is important that you recheck these rules as to:

1. Affixation of stamps of the Attorney General and Secretary of State;

2. Coverage by these stamps of all rules submitted; and

3. Inclusion of all pages to the rules in the approved set.

If you have any questions in this regard, please contact me.

Encs.
TAM/ls
cc: Ms. Kathy Burek
Mr. Duane Harves

AG copy

Minnesota Department of Agriculture
Agronomy Services Division

Adopted Rule Governing Soil and Plant Amendment Labels and Labeling Requirements

Rule as Adopted

3 MCAR S 1.0328 Soil and plant amendment labels and labeling requirements.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725 to prescribe conditions for the labels and procedures for labeling soil and plant amendments.

B. Definitions. For the purposes of this rule, the terms "brand," "commercial fertilizer," "commissioner," "fertilizer material," "guaranteed analysis," "guarantor," "label," "labeling," "plant amendment," "plant food," "sewage sludge," and "soil amendment" have the meanings given them in Minnesota Statutes, section 17.713.

C. Label requirements.

1. Any soil or plant amendment, except for sewage sludge, which is offered for sale, sold, or distributed in this state, in bags or other containers, must have placed on or affixed to the container the following information:

a. net weight;

b. brand name;

c. guaranteed analysis;

d. name and address of guarantor;

e. directions for the soil or plant amendment's use;

f. the soil or plant amendment's purpose or proposed use;

g. the words "NOT A PLANT FOOD PRODUCT"; and

h. a statement listing the common or usual English name of all ingredients used in manufacturing or blending the soil or plant amendment.

2. The label requirements in C.1.g. do not apply to soil

or plant amendments or sewage sludge offered for sale that contain fertilizer materials.

a. If the soil or plant amendment or sewage sludge contains fertilizer materials that meet the plant food content requirements of Minnesota Statutes, section 17.721, the fertilizer materials must be guaranteed and labeled in accordance with Minnesota Statutes, sections 17.711 to 17.729 and 3 MCAR S 1.0327.

b. If the soil or plant amendment or sewage sludge contains fertilizer materials that do not meet the plant food content requirements of Minnesota Statutes, section 17.721, the fertilizer materials may not be guaranteed and must be listed in a caution or warning statement with appropriate percentages of each plant food.

The following is an example of an acceptable caution or warning statement for a soil or plant amendment offered for sale containing fertilizer materials below the plant food requirements of 3 MCAR S 1.0327:

"CAUTION. This product may contain _____ percent nitrogen, _____ percent calcium, and _____ percent zinc. This information should be taken into consideration when the product is used in conjunction with commercial fertilizer or when sensitive crops or plants are involved."

3. Sewage sludge which is applied to a landspreading site must have a sewage sludge analysis containing the information listed in a. to g. All analytical values except pH and total solids must be recorded on a dry weight basis. The most recent sewage sludge analysis, in written or printed form, must be supplied to the owner, renter, or lessee of a landspreading site before sewage sludge is spread.

a. Percentage of total solids.

b. Volatile solids as a percentage of total solids.

c. pH.

d. Percentage of nitrogen, including the percentages of kjeldahl, ammonia, and in the case of aerobically digested and composted sewage sludge, nitrate.

e. Phosphorus and potassium, expressed as percentages of available phosphoric acid (P_2O_5) and soluble potash (K_2O).

f. Total weight of heavy metals, including milligrams per kilogram of zinc, copper, lead, nickel, cadmium, chromium, mercury, and molybdenum.

g. Polycholorinated biphenyls expressed as milligrams per kilogram.

4. For packaged soil or plant amendments or sewage sludge offered for sale, the information required in 1. or 2. must be in a readable and conspicuous form and must meet one of the following requirements:

a. appear on the front of the package;

b. occupy at least the upper one-third of either side of the package;

c. appear on the upper end of the container; or

d. be printed on a tag and attached to the package.

5. For bulk soil or plant amendments or sewage sludge offered for sale, the information required in 1. or 2., in written or printed form, must accompany delivery and be supplied to the purchaser at the time of delivery.

D. Labeling and labels. Proposed labeling and labels with directions for use of the soil or plant amendment must be furnished with an application for registration of a soil or plant amendment.

E. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that a label or labeling of a soil or plant amendment or sewage sludge does not meet the provisions in this rule.

APPROVED AS TO LEGALITY

June 1 19 83

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY Ted A. Mathison
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
JUN - 1 1983
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Secretary of State
3:16 PM

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Minnesota Department of Agriculture

Agronomy Services Division

Adopted Amendments to Rule Governing Fertilizer Labels and Labeling Requirements

Rule as Adopted

3 MCAR S 1.0327 Fertilizer labels and labeling requirements.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725 to prescribe conditions for labels and procedures for labeling fertilizers.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "brand," "commercial fertilizer," "commissioner," "fertilizer material," "grade," "guaranteed analysis," "guarantor," "label," "labeling," "mixed fertilizer," "organic," and "specialty fertilizer," have the meanings given in Minnesota Statutes, section 17.713.

1. "Department" means the Department of Agriculture.

2. "Fertilizer" means a commercial fertilizer or a specialty fertilizer.

3. "Plant nutrient" has the meaning given to "plant food" in Minnesota Statutes, section 17.713, subdivision 15 b.

C. Label information requirements. ~~Any fertilizer~~ Fertilizers offered for sale, sold or distributed in this state, in bags or other containers, must have placed on or affixed to the container the following information in the following format and order except as provided in D.:

HE 14 - F&F2

HE 14

1. net weight;

2. brand and grade;

3. guaranteed analysis:

Total Nitrogen (N) ....%

....% Ammoniacal Nitrogen

....% Nitrate Nitrogen

....% Water Insoluble Nitrogen

....% Urea Nitrogen

....% Other approved and determinable forms of Nitrogen

Available Phosphoric Acid (P_2O_5) ....%

Soluble Potash (K_2O) ....%

Other plant nutrients (elemental basis) ....%

4. sources of plant nutrients, when shown on the label, listing the common or usual English name of all ingredients used in manufacturing or blending the commercial fertilizer; HE 14 F&F 2

5. name and address of guarantor.

D. Exception to label information requirements.

1. If the percentage of any plant nutrient in specialty fertilizer is zero, the plant nutrient must be omitted from the statement. HE 14

2. Chemical forms of nitrogen must be listed, without limitation, when the fertilizer is a fish emulsion or when the nitrogen is organic or slowly released. Whenever the chemical forms of nitrogen are claimed, they must be claimed in the form indicated in C.3.

3. Chemical forms of nitrogen may be listed, when the fertilizer is not a fish emulsion, or when the nitrogen is not organic or not slowly released. HE 14

E. Location of label information. For packaged fertilizers, the information required in C. must be in a readable and conspicuous form and must meet one of the following requirements:

1. appear on the front of the package;

2. occupy at least the upper one-third of either side of the package;

3. appear on the upper end of the container; or

4. be printed on a tag and attached to the package.

F. Bulk fertilizers. For bulk fertilizers, the information required in C., in written or printed form, must accompany delivery and be supplied to the purchaser at the time of delivery. The format and order in C. is not required for bulk fertilizers. HE 14 F&F 2

G. Slowly released plant nutrients.

1. A fertilizer label may not bear a statement that

connotes or implies that certain plant nutrients contained in the fertilizer are released slowly over a period of time, unless the plant nutrients are identified and guaranteed.

2. The following types of plant nutrients may be labeled as slowly released plant nutrients:

a. water insoluble nitrogen products, such as natural organics, urea formaldehyde, IBDU and oxamide;

b. coated slow release plant nutrients such as sulfur coated urea and other encapsulated soluble fertilizers; and

c. occluded slow release plant nutrients, such as fertilizers mixed with waxes, resins or other inert materials and formed into particles.

3. The terms "water insoluble," "coated slow release" and "occluded slow release" are accepted as descriptive of these products, provided that the manufacturer can show a testing program approved by the department substantiating the claim.

4. When the nitrogen is organic and the label states the amount of organic nitrogen present in a phrase such as "nitrogen in organic form equivalent to ....% N," then the water insoluble nitrogen guarantee must not be less than 60 percent of the nitrogen so designated. For example, if the total nitrogen guarantee for a fertilizer is ten percent and the label states: "nitrogen in organic form equivalent to 2.5% N," then the water insoluble nitrogen guarantee must not be less than 1.5 percent (2.5% x 0.6 = 1.5%).

5. When a slowly released plant nutrient is less than 15 percent of the guarantee for total nitrogen, available phosphoric acid or soluble potash, the label may not bear a reference to those designations.

6. Until more appropriate methods are developed, Association of Official Analytical Chemists (AOAC) method number 2.074 in Official Methods of Analysis of the Association of Official Analytical Chemists (William Horwitz, ed.; 13th edition; 1980), or the appropriate AOAC method in a subsequent edition, must be used to confirm the coated slow release and occluded slow release plant nutrients and others whose slow

release characteristics depend on particle size. The AOAC method number 2.072 in Official Methods of Analysis of the Association of Official Analytical Chemists (William Horwitz, ed.; 13th edition; 1980), or the appropriate AOAC method in a subsequent edition, must be used to determine the water insoluble nitrogen of organic materials.

7. The following is an example of an acceptable breakdown of nitrogen where nitrogen is the only slow release plant nutrient in the fertilizer:

Total Nitrogen (N) 22%
5.5% Ammoniacal Nitrogen
5.5% Nitrate Nitrogen
1.0% Urea Nitrogen
10.0% Coated Slow Release Urea Nitrogen

8. When two or more plant nutrients in a fertilizer are coated or occluded to obtain slow release properties, the guarantees for those plant nutrients must be shown as footnotes rather than following each plant nutrient, as indicated in the following example:

Fertkote 10-15-20
Guaranteed Analysis

Total Nitrogen (N)* 10%
2.5% Ammoniacal Nitrogen
2.5% Nitrate Nitrogen
5.0% Urea Nitrogen
Available Phosphoric Acid (P_2O_5)* 15%
Soluble Potash (K_2O)* 20%
Sulfur (S) 14%
.....

* The nitrogen, phosphorus and potassium materials in this product have been coated to provide 9.0% coated slow release nitrogen (N), 13% coated slow release available phosphoric acid (P_2O_5), and 18% coated slow release soluble potash (K_2O).

H. Fish emulsions. The following is an example of an acceptable breakdown of nitrogen for a fish emulsion fertilizer:

Total Nitrogen (N) 5%

0% Nitrate Nitrogen
0% Urea Nitrogen
0.5% Ammoniacal Nitrogen
0.5% Water Insoluble Nitrogen
4.0% Other Water Soluble Nitrogen

1. In the example given above, water insoluble nitrogen is guaranteed but no claims or statements, such as organic, slow acting or slow release, can be used since it is less than 15 percent of the total nitrogen.

2. Zero guarantees are not acceptable as noted in D.; however, for this specific label they will be allowed so that the term "other water soluble nitrogen" will mean nitrogen that is soluble but is not nitrate, ammoniacal or urea nitrogen.

I. Additional plant nutrients permitted.

1. The commissioner will accept guarantees only for the additional plant nutrients listed in this part. Any or all of these additional plant nutrients in a particular fertilizer may be guaranteed if the following minimum content requirements are met.

Plant Nutrient	Minimum Percent Allowed
Calcium (Ca)	1.00
Magnesium (Mg)	0.50
Sulfur (S)	1.00
Boron (B)	0.02
Chlorine (Cl)	0.10
Cobalt (Co)	0.0005
Copper (Cu)	0.05
Iron (Fe)	0.10
Manganese (Mn)	0.05
Molybdenum (Mo)	0.0005
Sodium (Na)	0.10
Zinc (Zn)	0.05

2. If any of the plant nutrients in 1. are guaranteed, the procedures in a.-e. must be followed for labels and labeling.

a. The plant nutrients must be listed immediately following nitrogen, phosphorus and potassium.

b. The plant nutrients must appear in the format listed in 1.

c. The plant nutrients must appear in the order listed in 1.

d. The plant nutrients must be stated on the elemental basis.

e. The percentages of each of the plant nutrients contained in the fertilizer must be stated.

3. If the minimum requirement stated in 1. is not met for a particular plant nutrient, labels and labeling for the fertilizer may not contain any statement regarding that particular plant nutrient.

J. Labeling and labels. Proposed labeling and labels with directions for use of the fertilizer shall be furnished with the application for registration of a fertilizer.

K. Warning statements. Warning or caution statements are required on the label for any product which contains 0.03 percent or more of Boron in a water-soluble form or 0.001 percent or more of Molybdenum.

L. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that a label or labeling of a fertilizer does not meet the provisions in this rule.

Repealer. Rules Agr 319, 320, 321, and 323 of the Department of Agriculture are repealed.

APPROVED AS TO LEGALITY

June 1 19 83

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY Ted A. Mortensen
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
JUN - 1 1983
Joan Anderson Growe
Secretary of State
3:16 pm

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Minnesota Department of Agriculture

Agronomy Services Division

Adopted Rule Governing the Storage and Handling of Dry Commercial Fertilizer

Rule as Adopted

3 MCAR S 1.0326 Dry commercial fertilizers.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725, to govern the storage and handling of dry commercial fertilizer used for agricultural purposes.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "commercial fertilizer," "commissioner," "grade," "guaranteed analysis," and "person" have the meanings given in Minnesota Statutes, section 17.713.

1. "Department" means the Department of Agriculture.

2. "Dry commercial fertilizer" means either mixed fertilizer or fertilizer materials distributed in a nonfluid, nonpackaged form.

3. "Facility" means a place where dry commercial fertilizer is stored, mixed, blended, weighed, or handled.

4. "Incident" means a flood, fire, tornado, transportation accident, or other event causing a release of dry commercial fertilizer, whether accidental or not, which is likely to cause a hazard to people's lives, adjoining property, or the environment.

5. "Incident notification sign" means a sign issued by the department displaying emergency telephone numbers to be called in the case of an incident.

6. "Responsible party" means the person who has direct custody or control of the dry commercial fertilizer at the time of an incident.

7. "Safeguard" means a device, structure, or system or a combination of these designed to prevent the escape or movement

of a dry commercial fertilizer from the place it is stored which might result in the pollution of any surface or ground waters.

8. "Storage container" means a tank or bin in which dry commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

9. "Substantially altering" means modifying a facility by adding additional safeguards or storage containers, or by changing existing safeguards or storage containers. This does not include routine maintenance of existing safeguards or storage containers or of existing mixing, blending, weighing, and handling equipment.

C. Approval of facility and equipment.

1. A person beginning construction of a new facility or substantially altering an existing facility shall first obtain the approval of the commissioner.

2. The application for approval must be made on forms provided by the commissioner and must contain the following information:

a. the name, address, and phone number of the firm making the application;

b. the name, address, and phone number of the firm that will operate the facility;

c. the name, address, and phone number of the firm that will construct, install, or modify the site;

d. a statement as to whether the facility is new or existing and whether the alterations will be substantial;

e. the location of the site, including its legal description;

f. copies of any permits required for the construction, installation, or modification of the facility;

g. the size of the lot owned or leased;

h. the number and capacity of storage containers;

i. a description of the type of storage containers;

j. a description of the type of safeguards, if any;

k. at least three scale drawings of the facility, including other storage containers and buildings;

1. a description of the contingency plan filed with local fire and law enforcement personnel for emergency situations; and

m. any other information required by the commissioner reasonably related to the construction, installation, or modification of a dry commercial fertilizer facility in order to prevent hazards to people's lives, adjoining property, and the environment.

3. The commissioner shall approve the application when inspection of the facility and review of the application demonstrate that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property, and the environment.

4. The commissioner shall review approved facilities if the commissioner has reason to believe that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property, or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property, or the environment do exist, the commissioner shall proceed in accordance with Minnesota Statutes, section 17.728.

D. Variances. Upon receipt of a written request, the department shall grant a variance from this rule when the request shows that compliance with this rule would cause unreasonable economic hardship to the requester and that the requested use would not constitute a hazard to people's lives, adjoining property, or the environment. The department shall set forth in writing its reasons for granting or denying a requested variance within 60 days of the request.

E. Maintenance and operations.

1. Safeguards, storage containers, and mixing, blending, weighing, and handling equipment must be maintained and operated in a manner which will prevent avoidable amounts of particulate matter from leaving the facility.

This requirement does not apply to facilities governed by this rule which were established prior to the date of its

adoption unless the existing facility, without modification, would result in a hazard to people's lives, adjoining property, or the environment.

2. Storage containers must be maintained to prevent cross contamination of various dry commercial fertilizers.

3. Storage container areas must be kept free of clutter and ignitable materials including weeds and long dry grass.

F. Markings.

1. Each storage container must be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of the contents of the storage container.

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

G. Outside storage. Outside dry commercial fertilizer storage piles may not be located in areas where surface water runoff could enter storm sewers, sanitary sewers, or other surface or ground waters.

H. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other state agencies with jurisdiction regarding the incident. The responsible party shall take appropriate action to contain or clean up the results of the incident. The department shall be the lead state agency for making decisions involving clean-up or containment operations and shall initiate those operations necessary to prevent hazards to people's lives, adjoining property, or the environment. By initiating clean-up or containment operations, the department does not assume any liability for costs in addition to that prescribed or imposed by law.

I. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that the storage or handling of dry commercial fertilizer does not meet the provisions in this rule.

APPROVED AS TO LEGALITY

June 1 19 83

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY R. A. Martinson
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
JUN - 1 1983
Joan Anderson Growe
Secretary of State
3:16 PM

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Minnesota Department of Agriculture
Agronomy Services Division

Adopted Rule Governing the Storage and Handling of Liquid Commercial Fertilizer

Rule as Adopted

3 MCAR S 1.0325 Liquid commercial fertilizers.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725, to govern the storage and handling of liquid commercial fertilizer used for agricultural purposes.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "commercial fertilizer," "commissioner," "grade," "guaranteed analysis," and "person" have the meanings given in Minnesota Statutes, section 17.713.

1. "Appurtenances" means valves, pumps, fittings, and metering or dispensing devices.

2. "Department" means the Department of Agriculture.

3. "Facility" means a place where liquid commercial fertilizer is stored, mixed, blended, weighed, or handled.

4. "Incident" means a flood, fire, tornado, transportation accident, storage container rupture or leak, or other release of liquid commercial fertilizer, whether accidental or not, which is likely to cause a hazard to people's lives, adjoining property, or the environment.

5. "Incident notification sign" means a sign issued by the department displaying the emergency telephone numbers to be called in case of an incident.

6. "Liquid commercial fertilizer" means either mixed fertilizer or fertilizer materials distributed in a fluid, nonpackaged form.

7. "Responsible party" means the person who has direct custody or control of liquid commercial fertilizer at the time of an incident.

8. "Safeguard" means a device, structure, or system or a combination of these designed to prevent the escape or movement of a liquid commercial fertilizer from the place it is stored which might result in the pollution of any surface or ground waters.

9. "Storage container" means a tank in which liquid commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

10. "Substantially altering" means modifying a facility by adding additional safeguards or storage containers, or changing existing storage containers, safeguards, appurtenances, or piping. This does not include routine maintenance of existing safeguards, storage containers, appurtenances, and piping or of existing mixing, blending, weighing, and handling equipment.

C. Approval of facility and equipment.

1. A person beginning construction of a new facility or substantially altering an existing facility shall first obtain the approval of the commissioner.

2. The application for approval must be made on forms provided by the commissioner and must contain the following information:

a. the name, address, and phone number of the firm making application;

b. the name, address, and phone number of the firm that will operate the facility;

c. the name, address, and phone number of the firm that will construct, install, or modify the site;

d. a statement as to whether the facility is new or existing and whether the alterations will be substantial;

e. the location of the site, including its legal description;

f. copies of any permits required for the construction, installation, or modification of the facility;

g. the size of the lot owned or leased;

h. a statement of the approximate distance to nearby

lakes, streams, or drainage ditches, or a storm drain into which liquid could flow;

i. a statement of the general soil type found at the site and the type, depth, and proximity of wells on or near the site;

j. the nature of the terrain at the site;

k. the number and capacity of storage containers;

l. a description of the type of storage containers;

m. a description of the type of safeguards, including drawings or pictures, if available;

n. at least three scale drawings of the facility, including other storage containers and buildings;

o. a plumbing diagram showing the location and type of pumps and valves used to control all transfers of liquid commercial fertilizer;

p. a description of the contingency plan filed with local fire and law enforcement personnel for emergency situations; and

q. any other information required by the commissioner reasonably related to the construction, installation, or modification of a liquid commercial fertilizer facility in order to prevent hazards to people's lives, adjoining property, and the environment.

3. The commissioner shall approve the application when inspection of the facility and review of the application demonstrate that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property, and the environment.

4. The commissioner shall review approved facilities if the commissioner has reason to believe that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property, or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property, or the environment do exist, the commissioner shall proceed in accordance with Minnesota Statutes, section 17.728.

D. Previously established facilities. The person who operates a facility which was established prior to the effective date of this rule including persons who were granted a permit by the Pollution Control Agency, must obtain the commissioner's approval of the facility and equipment according to the following schedule:

1. The person who operates a facility established prior to January 1, 1965, must seek the approval of the commissioner within one year of the effective date of this rule.

2. The person who operates a facility established from January 1, 1965, to December 31, 1973, must seek the approval of the commissioner within two years of the effective date of this rule.

3. The person who operates a facility established from January 1, 1974, to May 31, 1975, must seek the approval of the commissioner within three years of the effective date of this rule.

4. The person who operates a facility established from June 1, 1975, to December 31, 1977, must seek the approval of the commissioner within four years of the effective date of this rule.

5. The person who operates a facility established from January 1, 1978, to December 31, 1979, must seek the approval of the commissioner within five years of the effective date of this rule.

6. The person who operates a facility established from January 1, 1980, to the effective date of this rule must seek the approval of the commissioner within six years of the effective date of this rule.

E. Variances. Upon receipt of a written request, the department shall grant a variance from this rule when the request shows that compliance with this rule would cause unreasonable economic hardship to the requester and that the requested use would not constitute a hazard to people's lives, adjoining property, or the environment. The department shall set forth in writing its reasons for granting or denying a

requested variance within 60 days of the request.

F. Maintenance and operations.

1. Safeguards, storage containers, and mixing, blending, weighing, and handling equipment must be maintained and operated in a manner which will prevent the escape of any liquid commercial fertilizer from the facility.

2. Adequate provisions must be made to protect all above-ground piping from physical damage that might result from moving machinery, equipment, and vehicles.

3. Main valves must be located as near to the storage container as possible and must be either closed and made inoperative when the facility is unattended or protected against tampering by adequate fencing.

4. Appurtenances and storage containers must be properly maintained, protected against rust, and painted to prevent corrosion and leakage.

5. Storage container areas must be kept free of clutter and ignitible materials including weeds and long dry grass.

G. Safeguards. Persons storing liquid commercial fertilizers in storage containers shall provide safeguards for containment at least equal to the holding capacity of the largest single storage container.

H. Markings.

1. Each storage container must be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of the contents of the storage container.

2. An identification sign must be 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.

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

I. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other state agencies with jurisdiction regarding the incident. The responsible party

shall take appropriate action to contain or clean up the results of the incident. The department shall be the lead state agency for making decisions involving the clean-up or containment operations and shall initiate those operations necessary to prevent hazards to people's lives, adjoining property, or the environment. By initiating clean-up or containment operations, the department does not assume any liability for costs in addition to that prescribed or imposed by law.

J. Exempt facilities. This rule does not apply to anhydrous ammonia facilities, or to portable or nonstationary tanks.

K. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that the storage or handling of liquid commercial fertilizer does not meet the provisions in this rule.

APPROVED AS TO LEGALITY

June 1 19 83

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY Ted A. Martinez
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
JUN - 1 1983
Joan Anderson Growe
Secretary of State

3:16 PM

STATE OF MINNESOTA

DEPARTMENT OF AGRICULTURE

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325 - 1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

ORDER ADOPTING RULES

The above-entitled matter came on for hearing before Hearing Examiner Alan W. Klein on the 21st day of December, 1982, at 9:00 A.M., in Conference Room A, Minnesota Department of Agriculture Building, 90 West Plato Boulevard, St. Paul, Minnesota after proper notice required by Minnesota Statutes, section 14.14, subdivision 1 (1982) was served upon all persons, associations, and other interested groups registered with the Minnesota Department of Agriculture for that purpose.

After affording interested persons an opportunity to present written and oral data, statements, and arguments, hearing all of the testimony, considering all of the evidence adduced and upon the records, files, and proceedings herein and applicable statutory standards or criteria, and confirming the need for and the reasonableness of the above-captioned rules,

NOW, THEREFORE, IT IS ORDERED that these rules identified as the Rules Governing Fertilizer Labels and Labeling Requirements, the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendment Labels and Labeling Requirements are adopted this 18th day of April, 1983, pursuant to the authority vested in me by Minnesota Statutes, section 17.725 (1982).

STATE OF MINNESOTA

Jim Nichols

JIM NICHOLS
COMMISSIONER OF AGRICULTURE

OFFICIAL NOTICES

Pursuant to the provisions of Minn. Stat. § 15.0412, subd. 6, an agency, in preparing proposed rules, may seek information or opinion from sources outside the agency. Notices of intent to solicit outside opinion must be published in the *State Register* and all interested persons afforded the opportunity to submit data or views on the subject, either orally or in writing.

The *State Register* also publishes other official notices of state agencies, notices of meetings, and matters of public interest.

Department of Agriculture Agronomy Services Division

Notice of Intent to Solicit Outside Opinion Regarding Proposed Rules Governing the Labeling and Distribution of Specialty Fertilizers

Notice is hereby given that the Minnesota Department of Agriculture is considering adoption of rules which would govern the labeling and distribution of specialty fertilizers.

The proposed rules are authorized by Minn. Stat. § 17.725, subd. 1. The rules, if adopted, would set standards for the labeling and distribution of specialty fertilizers.

All interested or affected persons or groups are requested to submit information on this subject. Written or oral information, statements or comments should be addressed to:

Gary Braun (612) 296-8379
Agronomy Services Division
Minnesota Department of Agriculture
90 West Plato Boulevard
Saint Paul, Minnesota 55107

All statements of information and comment must be received by July 1, 1980. Any written material received by this date shall become part of the record on any rules hearing held on this subject.

May 12, 1980

William Bulger, Director
Agronomy Services Division

Department of Corrections Victim Services Division

Funds Available for Sexual Assault Services

The Minnesota Department of Corrections will be awarding approximately $50,000 this year for the provision of sexual assault services. Priority will be given to underserved geographic areas of the state and other underserved populations. Funds appropriated by the State Legislature are available for implementing programs designed to provide one or more of the following services: direct crisis intervention and support services to victims of sexual assault; training programs; the coordination of services of existing agencies; community education; and development of services to meet the needs of special populations, for example, the child, racial minorities, the mentally or physically disabled, and the elderly.

Proposals for funds will be reviewed. The deadline for proposals is May 22, 1980.

Organizations interested in applying for these funds should contact the Minnesota Program for Victims of Sexual Assault, 430 Metro Square Building, St. Paul, Minnesota, 55101, 612-296-7084.

Department of Education Vocational-Technical Education Division

Notice of Hearing on 1981 Area Vocational-Technical Institute Aid Distribution Levels

This is to announce that a public hearing will be held on Monday, May 19, at 9:00 a.m. in Room 716 of the Capitol Square Building, 550 Cedar Street, St. Paul, Minnesota 55101, on the recommended Fiscal Year 1981 area vocational-technical institute aid distribution levels.

Department of Employee Relations

Notice of Meeting

The Governor's Task Force on Personnel Management created by Executive Order No. 79-37 has scheduled meetings from 1:00 p.m. until 4:00 p.m. on May 28, 1980 and on June 26, 1980. The May meeting will be held at the Ramada Inn, 4200 W. 76th Street (494 and France Avenue) Bloomington, Minnesota. The location of the June meeting when arranged will be available from the Department of Employee Relations. Phones: 296-2616, 296-2914 and 296-2917.

Information regarding meetings of the sub-committees of the Task Force (on Policy and Practice, Examining and Referral, Classification, Labor Relations and Total Compensation) also may be secured by calling the above numbers.

Department of Transportation Technical Services Division

Notice of Availability of Contract for Power Factor Study, I94 Tunnel, Minneapolis

The electrical loads in the subject tunnel present to Northern States Power Company power factors in the area of 0.3 to 0.5 over the span of a calendar year. This power factor must be at least 0.9 in order to eliminate the penalty charges that have been running an average of $18,000 a year. It has also come to our attention that a large demand charge is also being assessed. It is recommended that the consultant study this problem also and give us recommendations for its reduction. Specifically, the following tasks are recommended:

(1) Consultant to study Power Factor and Demand problems.

(2) Consultant to write report on findings and to orally present solutions to the state.

(3) Consultant to present cost estimate, including consultant fees, to the state.

(4) Upon approval of (2) and (3) above the consultant will prepare complete drawings and specifications for the state. The state will take bids and select the contractor.

(5) The consultant will act as advisor and chief inspector to the state's project manager during the construction period.

The estimated cost for this project is $15,000.

Firms desiring consideration should submit their brochure and/or experience resume such as the federal forms 254 and 255 before January 28, 1980. This is not a request for proposal.

For information relating to the technical aspects of the project please contact:

Mr. Jack W. Tweedale
Assistant Traffic Engineer, Electrical
Room 309
Transportation Building
St. Paul, Minnesota 55155
Telephone: (612) 296-6164

Please direct your response to:

B. E. McCarthy
Consultant Services Engineer
Room 612-B
Transportation Building
St. Paul, Minnesota 55155
Telephone: (612) 296-3051

OFFICIAL NOTICES

Pursuant to the provisions of Minn. Stat. § 15.0412, subd. 6, an agency, in preparing proposed rules, may seek information or opinion from sources outside the agency. Notices of intent to solicit outside opinion must be published in the *State Register* and all interested persons afforded the opportunity to submit data or views on the subject, either orally or in writing.

The *State Register* also publishes other official notices of state agencies, notices of meetings, and matters of public interest.

Department of Agriculture Agronomy Services Division

Notice of Intent to Solicit Outside Opinion Concerning Proposed Amendments to Rules Governing Labeling and Distribution of Soil Conditioners; Labeling and Additional Minerals Permitted of Trace Minerals in Commercial and Specialty Fertilizer; and Storage, Handling and Distribution of Anhydrous Ammonia

Notice is hereby given that the Minnesota Department of Agriculture is considering amending the above-mentioned rules. The department is seeking information or opinions from sources outside the department in regard to the nature and utility of amendments to the rules governing soil conditioners and trace minerals (Agr 319-323). In addition, notice is also given that the Department is continuing consideration of amendments to the rules governing the storage, handling and distribution of anhydrous ammonia (Agr 324). A prior notice to this effect appeared in the July 18, 1977 *State Register* (1 S.R. 109). This notice is a continuation of that solicitation; however, persons or agencies that submitted oral or written comments at that time are asked to resubmit such comments or material.

The rules and amendments to the rules are authorized by Minn. Stat. § 17.725, subd. 1, which allows the commissioner to adopt rules and regulations regarding the manufacture, sale, distribution, labeling, etc. of commercial fertilizers, soil conditioners and soil additives or amendments. The proposed amend-

ments, if adopted, would set standards and requirements for labeling, storage, composition, handling and distribution of the above-mentioned fertilizers.

All interested or affected persons or groups are requested to submit information on this subject. Written or oral information, statements or comments should be addressed to:

Gary Braun (612) 296-8379
Agronomy Services Division
Minnesota Department of Agriculture
90 West Plato Boulevard
Saint Paul, Minnesota 55107

All statements of information and comment must be received by May 1, 1980. Any written material received by this date shall become part of the record of any rules hearing held on this subject.

January 21, 1980

William Bulger, Director
Agronomy Services Division

Notice of Intent to Solicit Outside Opinion Regarding Proposed Rules Governing the Storage, Handling and Distribution of Liquid Fertilizer, Dry Fertilizer and Aqueous Solutions of Nitrogen

Notice is hereby given that the Minnesota Department of Agriculture is considering adoption of rules which would govern the storage, handling and distribution of liquid fertilizer, dry fertilizer and aqueous solutions of nitrogen.

The proposed rules are authorized by Minn. Stat. § 17.725, subd. 1. The rules, if adopted, would set standards for the storage, handling and distribution, including all modes of transport, of liquid fertilizer, dry fertilizer and aqueous solutions of nitrogen.

All interested or affected persons or groups are requested to submit information on this subject. Written or oral information, statements or comments should be addressed to:

Gary Braun (612) 296-8379
Agronomy Services Division
Minnesota Department of Agriculture
90 West Plato Boulevard
Saint Paul, Minnesota 55107

All statements of information and comment must be received by May 1, 1980. Any written material received by this date shall become part of the record on any rules hearing held on this subject.

January 21, 1980

William Bulger, Director
Agronomy Services Division

Environmental Quality Board Power Plant Siting

Notice of Acceptance of Application Amendment to Prairie Island-Eau Claire 345,000 Volt Construction Permit Application to Include Transmission Alternatives from Substation at Allen S. King Generating Plant on St. Croix River to Eau Claire

Note: This notice contains information about the acceptance by the Minnesota Environmental Quality Board (MEQB) of an amendment proposal by Northern States Power Company (NSP) to expand the study area for NSP's Prairie Island-Eau Claire 345 kilovolt (kV) construction permit application. The amended application includes the Minnesota portion of a proposed transmission line extending from the substation at the Allen S. King generating plant to Eau Claire, Wisconsin. This notice also serves to provide notification of public information meetings which will be held to describe the project and public participation procedures used in the transmission line routing process as prescribed by Minnesota law.

On December 20, 1979, the Minnesota Environmental Quality Board (MEQB) formally accepted NSP's proposed amendment to the Prairie Island-Eau Claire construction permit application which had been accepted by the MEQB on September 21, 1978. The Prairie Island-Eau Claire application is for a single circuit 345 kV transmission line route from the substation at the Prairie Island generating plant across the Mississippi River to Eau Claire, Wisconsin. Because the Wisconsin Public Service Commission (WPSC) is considering routing alternatives from Eau Claire to the Allen S. King Plant in Oak Park Heights, Minnesota, NSP proposed that the MEQB review the Minnesota portion of the King-Eau Claire alternatives. MEQB acceptance of NSP's application amendment allows the MEQB to study routing alternatives in Minnesota that would cross the St. Croix River to Wisconsin.

NSP in their amendment application proposed one additional route in Minnesota for this line (see Figure 1). A route can be a strip of land up to a mile and a quarter wide in which the right of way of the transmission line could be located; a right of way is the specific area needed for an easement within which the line will be constructed. For the route from the Allen S. King plant, NSP has proposed an alignment immediately adjacent to an existing 115/69 kV double circuit transmission line crossing the St. Croix River.

STATE REGISTER

STATE OF MINNESOTA



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October 5, 1981

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compensation judge. A copy of the letter of transmittal of the exhibits or documents shall remain in the file as part of the record of the case.

C. Request for return. Upon expiration of the time in which to appeal, exhibits or other documentary evidence shall be returned to their source upon the request of the party which introduced the evidence into the record. A request for return of exhibits or documents shall be made in writing to the compensation judge, shall contain the title and appropriate identification number of the case in which they were entered into evidence, and shall identify the exhibits or documents requested. A telephone number of the person making the request shall be included with the request.

Department of Agriculture
Agronomy Services Division

Proposed Rules Governing Storage and Handling of Liquid and Dry Commercial Fertilizer

Notice of Intent to Adopt Rules without a Public Hearing

Notice is hereby given that the Minnesota Department of Agriculture proposes to adopt the above-entitled rules without a public hearing. The Commissioner of Agriculture has determined that the proposed adoption of these rules will be noncontroversial in nature and has elected to follow the procedures set forth in Minnesota Statutes, § 15.0412, subdivision 4h (1980).

Persons interested in these rules shall have 30 days to submit comment on the proposed rules. The proposed rules may be modified if the modifications are supported by the data and views submitted to the agency and do not result in a substantial change in the proposed language.

Unless seven or more persons submit written requests for a public hearing on the proposed rules within the 30-day comment period, a public hearing will not be held. In the event a public hearing is required, the agency will proceed according to the provisions of Minnesota Statutes section 15.0412, subdivisions 4-4f (1980).

Persons who wish to submit comments or a written request for a public hearing should submit such comments or request to: Gerald Heil, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, MN 55107, (612) 296-1486. If a public hearing is requested, identification of the particular objection, the suggested modifications to the proposed language, and the reasons or data relied on to support the suggested modification is desired.

Authority for the adoption of these rules is contained in the Minnesota Fertilizer, Soil Amendment and Plant Amendment Law, Minn. Stat. §§ 17.711 to 17.729, as amended by Laws of 1981, ch. 214. Additionally, a statement of need and reasonableness that describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rules has been prepared and is available upon request from: Gerald Heil, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, MN 55107, (612) 296-1486.

Upon adoption of the final rules without a public hearing, the proposed rules, this notice, the statement of need and reasonableness, all written comments received, and the final rules as adopted will be delivered to the Attorney General for a review as to form and legality, including the issue of substantial change. Persons who wish to be advised of the submission of this material to the Attorney General, or who wish to receive a copy of the final rules as proposed for adoption, should submit a written statement of such request to Gerald Heil, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, MN 55107, (612) 296-1486.

The purpose of the Minnesota Fertilizer, Soil Amendment and Plant Amendment Law is to regulate the sale and handling of fertilizers and soil conditioners within the State of Minnesota. Presently, no rules exist which govern the storage and handling of liquid and dry commercial fertilizers. Proper storage and handling of liquid and dry commercial fertilizers benefits public health and safety by helping to reduce the number and severity of fertilizer spills which could adversely affect ground and surface water quality.

Please be advised that Minnesota Statutes, Chapter 10A, requires each lobbyist to register with the Ethical Practices Board within five days after he/she becomes a lobbyist. Lobbying includes attempting to influence rulemaking by communicating or using others to communicate with public officials. A lobbyist is generally any individual who spends more than $250 per year for

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

lobbying or any individual who is engaged for pay or authorized to spend money by another individual or association and who spends more than $250 per year or five hours per month at lobbying. The statute provides certain exceptions. Questions should be directed to the Ethical Practices Board, 41 State Office Building, St. Paul, Minnesota 55155, (612) 296-5615.

Copies of this notice and the proposed rules are available and may be obtained by contacting Gerald Heil, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, Minnesota 55107, (612) 296-1486.

September 17, 1981

Mark W. Seetin
Commissioner of Agriculture

Rules as Proposed (all new material)

3 MCAR § 1.0325 Liquid fertilizers.

A. Authority and purpose. This rule is adopted by the Commissioner of Agriculture pursuant to Minn. Stat. § 17.725, to govern the storage and handling of liquid commercial fertilizer used for agricultural purposes.

B. Definitions. For the purpose of this rule, the terms defined in this rule, and the terms defined in Minn. Stat. § 17.713, have the meanings given them.

1. "Appurtenances" means valves, pumps, fittings and metering or dispensing devices.

2. "Department" means the Department of Agriculture.

3. "Incident" means a flood, fire, tornado, transportation accident, storage container rupture or leak or other release of liquid fertilizer, whether accidental or not, which is likely to cause adverse effects on the environment.

4. "Liquid commercial fertilizer" means mixed fertilizer or fertilizer materials distributed in a nonpackage form.

5. "Responsible party" means the person who has direct custody or control of liquid fertilizer at the time of an incident.

6. "Safeguard" means a facility, device or system or a combination of any of them designed to prevent the escape or movement of a substance or solution from the place it is stored or kept under conditions which might result in the pollution of any state waters.

7. "Storage container" means a tank in which commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

C. Approval of facility and equipment. A person beginning construction of a new liquid fertilizer storage facility or modifying an existing liquid fertilizer storage facility shall first obtain the approval of the Commissioner of Agriculture or his designee. The application shall be made on forms provided by the commissioner. The application shall be approved when inspection of the facility and review of the application demonstrates that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property or the environment.

At any time, the commissioner may review approved facilities where it appears that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property or the environment do exist, the commissioner may withdraw approval or require additional mitigation measures to be taken.

D. Exceptions. Parts F.1. and G.3. shall not apply to facilities and equipment governed by this rule which were established prior to the date of adoption of this rule unless the existing facility, without modification, would result in a hazard to people's lives, adjoining property or the environment.

E. Variances. Upon receipt of a written request, the department may grant a variance from a provision of this rule. A variance will be granted when the request shows that compliance with this rule would cause unnecessary hardship to the requester and that the requested use would not constitute a hazard to people's lives, adjoining property or the environment. The department shall set forth in writing its reasons for granting or denying a requested variance.

F. Equipment.

1. Adequate provisions shall be made to protect all exposed piping from physical damage that might result from moving machinery, equipment and vehicles.

2. Main valves shall be located as near to the storage container as possible and shall be either closed and made inoperative when the facility is unattended or protected against tampering by adequate fencing.

3. Appurtenances shall be inspected, properly maintained, protected against rust and painted to prevent corrosion or failure.

G. Storage containers.

1. Storage containers shall be inspected, properly maintained, protected against rust and painted to prevent corrosion or failure.

2. Storage container areas shall be kept free of clutter and ignitible materials including weeds and long dry grass.

3. Persons storing liquid fertilizers in storage containers of a rated capacity of 500 gallons or more shall provide safeguards for containment equal to the amount of the largest single storage container.

H. Markings.

1. Each storage container shall be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of the contents of the storage container.

2. An identification sign shall be displayed in a clearly legible and conspicuous manner stating the name, address and telephone number of the nearest agent, representative or owner of the storage facility.

I. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other appropriate state agencies. The responsible party shall take appropriate action to contain or clean up the incident. The department shall be the lead state agency for making decisions involving the clean-up or containment operations and may initiate those operations if it appears necessary. By initiating clean-up or containment operations, the department shall not be deemed to assume any liability for costs in addition to that prescribed or imposed by law.

3 MCAR § 1.0326 Dry fertilizers.

A. Authority and purpose. This rule is adopted by the Commissioner of Agriculture pursuant to Minn. Stat. § 17.725 to regulate the storage and handling of dry commercial fertilizer used for agricultural purposes.

B. Definitions. For the purpose of this rule, the terms defined in this part, and the words defined in Minn. Stat. § 17.713, have the meanings given them.

1. "Department" means the Department of Agriculture.

2. "Dry commercial fertilizer" means both mixed fertilizer and fertilizer materials distributed in a nonpackage form.

3. "Incident" means a flood, fire, tornado, transportation accident or other event causing a release of dry fertilizer, whether accidental or not, which is likely to cause adverse effects on the environment.

4. "Responsible party" means the person who has direct custody or control of the dry fertilizer at the time of an incident.

5. "Storage container" means a tank or bin in which commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

C. Approval of facility and equipment. A person beginning construction of a new dry fertilizer storage facility or modifying an existing dry fertilizer storage facility shall first obtain the approval of the Commissioner of Agriculture or his designee. The application shall be made on forms provided by the commissioner. The application shall be approved when inspection of the facility and review of the application demonstrates that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property or the environment.

At any time, the commissioner may review approved facilities where it appears that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property or the environment do exist, the commissioner may withdraw approval or require additional mitigation measures to be taken.

D. Exceptions. Part G. shall not apply to facilities and equipment governed by this rule which were established prior to the date of adoption of this rule unless the existing facility, without modification, would result in a hazard to people's lives, adjoining property or the environment.

E. Variances. Upon receipt of a written request, the department may grant a variance from a provision of this rule. A variance will be granted when the request shows that compliance with this rule would cause unnecessary hardship to the

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

requester and that the requested use would not constitute a hazard to people's lives, adjoining property or the environment. The department shall set forth in writing its reasons for granting or denying a requested variance.

F. Equipment. Equipment shall be maintained in good operating order.

G. Operations. Dry commercial fertilizer facilities shall be operated to allow the unloading, storage, mixing and loading of the bulk materials in a manner which will prevent avoidable amounts of particulate matter from leaving the premises.

H. Storage containers. Storage containers shall be maintained to prevent major cross contamination of various dry commercial fertilizer ingredients and materials. Storage container areas shall be kept free of clutter and ignitible materials including weeds and long dry grass.

I. Markings. Each storage container shall be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of its contents.

J. Outside fertilizer storage. Outside fertilizer storage piles shall not be located in areas subject to floods or where surface water runoff could enter storm sewers, sanitary sewers or other state waters.

K. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other appropriate state agencies. The responsible party shall take appropriate action to contain or clean up the incident. The department shall be the lead state agency for making decisions involving clean-up or containment operations and may initiate those operations if it appears necessary. By initiating clean-up or containment operations, the department shall not be deemed to assume any liability for costs in addition to that prescribed or imposed by law.

Department of Commerce
Securities and Real Estate Division

Proposed Rule SDiv 2030 (Cheap Stock), Relating to the Minnesota Securities Act

Notice of Intent to Amend Rule without a Hearing

Notice is hereby given that, pursuant to her authority under Minn. Stat. § 80A.25 (1980), the Commissioner of Securities and Real Estate intends to amend Rule SDiv 2030 (Cheap Stock), relating to the Minnesota Securities Act (Minn. Stat. ch. 80A). The commissioner desires that the proposed rule be amended without a public hearing in accordance with Minn. Stat. § 15.0412, subd. 4h (1980).

A free copy of the proposed rule may be obtained from the commissioner's office. Those interested in submitting comment pertaining to the proposed rule may do so within 30 days of publication of this notice in the *State Register*. Additionally, if during the 30-day comment period, seven or more persons make a written request for a hearing on the proposed rule, the commissioner will hold a public hearing in accordance with Minn. Stat. § 15.0412, subdivisions 4 to 4g (1980). A request for a copy of the proposed rule, all comments, any requests for a hearing and all questions regarding the proposed rule should be directed to:

Mr. Daniel W. Hardy
Assistant to the Commissioner
Securities and Real Estate Division
Department of Commerce
500 Metro Square Building
Saint Paul, Minnesota 55101
Telephone: (612) 296-5689

The proposed rule may be modified by the commissioner if the modifications are supported by the data and views submitted during the 30-day comment period, provided the modifications do not result in substantial change.

The commissioner has prepared a statement of need and reasonableness which contains a summary of the evidence justifying both the need for, and the reasonableness of, the proposed rule. The statement of need and reasonableness is available for inspection by the public, during regular business hours, at the above address.

If no hearing is required, the commissioner will submit to the Attorney General the proposed rule and notice as published in the *State Register*, the rule as proposed for adoption, any written comments received by the commissioner during the 30-day comment period, and the statement of need and reasonableness for the rule. On the same day these materials are submitted to the Attorney General the commissioner will notify any person who has requested that the commissioner inform him or her of when these materials have been submitted to the Attorney General. Any person wishing to be so notified should contact Mr. Hardy at the address listed above.

CARGILL, INCORPORATED
LAW DEPARTMENT
P. O. BOX 9300
MINNEAPOLIS, MN 55440
TELEX 290625

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GEORGE F. GAHLES
NEW YORK

WRITER'S DIRECT DIAL NUMBER
612/475-6374

November 16, 1981

Mr. Gerald Heil, Director
Planning Division
Department of Agriculture
State of Minnesota
90, West Plato Boulevard
St. Paul, Minnesota 55107

Re: Proposed Rules Governing Storage and Handling of Liquid and Dry Commercial Fertilizer M.C.A.R. S.1.0325 and S.1.0326

Dear Mr. Heil:

We now enclose in duplicate Cargill's comments on the above-proposed rules. Cargill unfortunately was somewhat late in obtaining notice of these proposed rules and, as a result, its comments have been prepared in some haste. They do, however, reflect Cargill's serious concern with the items raised. We would very much appreciate being put on your mailing list in connection with this matter and when appropriate, to be advised of future developments in this rulemaking proceeding.

Yours very truly,

Victor Anderson

Victor Anderson

VA:cc
Enc.
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Proceeding of the State of Minnesota
Department of Agriculture
Agronomy Services Division
Pursuant to Notice in the Minnesota
State Register on Monday, October 5, 1981

In the Matter of the Proposed Adoption
of Rules of the Minnesota Department
of Agriculture Governing Storage
and Handling of Liquid and Dry
Commercial Fertilizer

Comments by Cargill, Incorporated
as an interested party



Due Date: November 18, 1981

Dated: November 17, 1981

Victor Anderson
Assistant General Counsel
Cargill, Incorporated
P. O. Box 9300
Minneapolis, Minnesota
55440

The first Cargill concern falls under the general heading of needless duplication of regulations. While it obviously takes both courage, and regulatory restraint, to ask, and to answer, the question objectively, we believe the question should be asked, with reference to significant portions of these proposed rules, whether the safeguards in question are not already in place under other regulations which adequately protect the public interest thus rendering the present proposals duplicative and redundant. If the answer to that question is in the affirmative we believe the true civil servant, with the public interest genuinely at heart, will conclude that duplicative layers of regulation are not good government.

The second Cargill concern falls under the general heading of vagueness, or lack of appropriate standards and guidelines, and also general ambiguity. It is always unfair, wasteful and frustrating to a regulated entity, who is seeking good faith compliance with the laws, when those laws lack the clarity and precision to enable the regulated entity to attain compliance with confidence, as opposed to being left at the mercy of future, and perhaps, varied subjective judgments of a series of inspectors.

Cargill submits that the proposed regulations are prone to both of these defects.

<u>The Issue of Duplication</u>

It appears to Cargill that the Minnesota Pollution Control Agency (as well as the Federal Environmental Agency)

already has in place laws, regulations and standards that include potential pollution problems of air and water from facilities storing and handling bulk fertilizers.

In addition the same Minnesota agency has in place a set of regulations dealing with pre-construction review of new facilities, or modifications of old, and has a permitting system dealing with new and modified sources of pollution to which facilities storing and handling fertilizers would already be subject in most material respects.

A further level of duplication in matters of worker health and safety is imposed by the Minnesota Department of Labor's Occupational, Safety and Health Act (as well as the Federal OSHA laws).

Cargill would urge that these questions of needless duplication be reviewed with care before any final regulations are promulgated for, from the viewpoint of a Minnesota business, such as our own, seeking good faith compliance with all laws, the burdens created by dual regulatory jurisdictions, and duplicate regulations, can be costly and serious. They invariably create delay, often ambiguity and uncertainty, and increase, needlessly, the cost of attaining the appropriate public interest objectives.

If there are problems unique to fertilizer facilities, and the handling and storage of bulk fertilizers, consideration should be given to amending the

Comments of Cargill, Incorporated
as an interested party

Comes now Cargill, Incorporated (hereinafter called "Cargill") as an interested party in these proposed rules and respectfully submits the following comments;

Identification

Cargill is a corporation incorporated under the laws of Delaware but it has its principal place of business in Minnesota. The primary business of Cargill is that of a grain merchant merchandising grain extensively, both domestically and for export. Cargill, however, operates many other businesses the majority of which are related to agriculture both within the borders of this state and elsewhere. Particularly germane to these present comments is the fact that Cargill, both within and without the state, is engaged in the merchandising, storing and handling of bulk fertilizer, both dry and liquid.

Introduction

Cargill wholeheartedly supports the goals of our safety and environmental laws in general, both State and Federal, namely the protection of our environment from deterioration and the preservation of such vital resources as clean air and water and the protection of the health and safety of our citizens. Cargill has always believed that the achievement of these goals in an adequate, practical, efficient and reasonable manner must be the product of intelligent cooperation between the business community and

the various government entities charged by law with these responsibilities. Cargill has welcomed current developments in the regulatory climate espoused by policy makers at the Federal and State levels, both executive and legislative, that have indicated a desire to pursue efficiency in government regulation and to eschew ambiguity, excessive bureaucratic burdens on citizens, needless regulatory duplication and the waste flowing from regulatory excesses. In lieu of such regulatory excesses, of which there have been many examples on the national scene, it is Cargill's hope, already echoed by many policy makers, that this will be a decade in which common sense and efficiency will characterize all regulatory initiatives. Cargill, as a resident of Minnesota, would particularly like to see the agencies of this State be in the forefront of this desirable national trend towards intelligent, non-duplicative, non-wasteful and unambiguous regulatory techniques which advance appropriate public interest goals in a sound manner.

It is in this spirit, and with these high expectations, that Cargill has reviewed the proposed rules, the subject of these comments. This review has left Cargill with two basic areas of concern which it now respectfully draws to the attention of the authors and promulgators of these rules with the suggestion that these matters be examined objectively and with care.

presently applicable regulations of other agencies to deal with such problems rather than the creation of new, duplicative and jurisdictionally confusing regulations.

The Issue of Vagueness and Ambiguity

Cargill's concern under this heading relates primarily to the attempts, in these rules, to create in the environmental area standards and levels of performance or compliance. The national experience has shown that such standards are not easy to define and then to write with precision. However the experienced State and Federal agencies have made progress in this difficult area. Our concern with the proposed rules is that they do not appear to have attempted any precision whatever but have opted for generalizations which simply leave the would be complier without guidance and at the mercy of the ex post facto, subjective judgments of inspectors against which there can be little meaningful administrative, or judicial recourse..

Conclusion

Cargill would respectfully urge that these basic questions be reviewed with care. If the Department of Agriculture remains convinced, after such a review, that it needs to impose separate regulations in this area, in the public interest, then appropriate agreement should be sought from the other agencies mentioned to defer such matters to one appropriate regulatory body so as to avoid the bureaucratic waste and delay, the avoidance of which is the concern today of all good regulators.

An appropriate and common sense approach to environmental regulation in this area which avoids dual jurisdictions and regulatory waste will have Cargill's wholehearted support. As they are presently drawn, and for the reasons outlined herein, Cargill feels it must register an objection to the proposed rules as drawn.

Respectfully submitted,

CARGILL, INCORPORATED

By Victor Anderson

Victor Anderson
Assistant General Counsel
P. O. Box 9300
Minneapolis, Minnesota
55440

Minnesota Pollution Control Agency



October 16, 1981

Mr. Gerald Heil
Minnesota Department of Agriculture
90 W. Plato Blvd.
St. Paul, Minnesota 55107

Dear Mr. Heil:

The Minnesota Pollution Control Agency, Division of Air Quality staff has reviewed the proposed rules governing storage and handling of liquid and dry commercial fertilizer. Based upon this review and the interaction which the Division staff has had with the Department of Agriculture in the past, it is recommended that the definitions for "Liquid commercial fertilizer" and "Dry commercial fertilizer" be clarified. The Division of Air Quality staff feels that it is important to clarify what is meant by liquid fertilizer to avoid confusion as to whether the rule would apply to anhydrous ammonia. The terminology was not clear to us and may be misinterpreted by the general public.

Please provide a copy of the final rules as proposed for adoption and submitted to the Attorney General to Richard Sandberg, Minnesota Pollution Control Agency, Division of Air Quality, 1935 W. County Road B2, Roseville, Minnesota 55113.

Thank you.

Sincerely,

J. Michael Valentine

J. Michael Valentine
Director
Division of Air Quality

JMV:jms

Phone: 296-7331
1935 West County Road B2, Roseville, Minnesota 55113
Regional Offices · Duluth/Brainerd/Detroit Lakes/Marshall/Rochester
Equal Opportunity Employer

THE PILLSBURY COMPANY
608 SECOND AVENUE SOUTH
MINNEAPOLIS, MINNESOTA 55402

November 18, 1981

Gerald Heil
Minnesota Department of
Agriculture
90 West Plato Blvd.
St. Paul, MN 55107

RE: Proposed Rule Governing Storage and Handling of
Dry Commercial Fertilizer
3 MCAR § 1.0326

Dear Mr. Heil:

The Pillsbury Company is a major food business with food manufacturing, research and headquarters offices, and bulk commodities handling facilities located in the State of Minnesota. Since we handle dry commercial fertilizer as a part of our commodities handling operations, we are interested in your recently proposed rule, 3 MCAR §1.0326 Dry Fertilizers, on this subject. At this time, we thank you for allowing us the opportunity to provide the Minnesota Department of Agriculture with our comments on this proposed rule. We ask that you consider them before proceeding with its adoption.

The proposed rule contains a number of provisions which are designed to protect the public by preventing hazards to people's lives, adjoining property, and the environment. We are concerned that these provisions duplicate or overlap with rules adopted by other state agencies which currently regulate our dry fertilizer handling activities; namely, the Minnesota Pollution Control Agency ("MPCA") and the Minnesota Occupational Safety and Health Administration ("MOSHA").

First, our facility is now subject to inspections by both MPCA and MOSHA which are made to review our safeguards for preventing hazards to the environment and human safety. Under subsection C of the proposed rule, we would be subject to yet another agency inspection regarding the same issues.

Second, subsection C would require us to apply to your agency for a permit before constructing a new dry fertilizer storage facility or modifying an existing one. Since we are

now required to apply to the MPCA for permits under these circumstances, we are concerned that this permit requirement might add costly and time-consumming steps to future construction projects. In our opinion, construction plans and specifications and other information which is necessary to assure environmental and human safety should be submitted to only one agency, which can then share that material with the other state agencies having jurisdiction over the project.

Third, subsection G appears to establish emission standards for particulate matter. The MPCA in its APC 6 has adopted standards for particulate matter emissions. Similar standards are contained in the Minnesota State Implementation Plan which has been approved and is enforceable by the federal Environmental Protection Agency. We are concerned that we do not become subject to yet another and possibly differing emission standard.

Fourth, the incident reporting requirement set forth in subsection K adds your agency to the list of agencies which we are now required to notify in the event of a release of any fertilizer into the environment. Are there existing memorandums or letters of understanding with other "appropriate" state agencies? Is there mutual agreement that the Minnesota Department of Agriculture will be the "lead agency"?

Finally, the proposed rule does not define some key words such as "modify" and "storage facility." In particular, it is unclear as to what actions constitute "modifying" an existing dry storage facility sufficient to require a permit under subsection C.

In summary, our primary concern is the extent to which the proposed rule appears to overlap and even duplicate existing rules of the state agencies; in particular, the MPCA rules regarding permits, facility inspection and incident reporting. These apparent overlaps have the potential to add costs, delays and time-consumming paperwork to daily operations as well as any future construction projects. We ask that prior to adoption the rules be clarified so as to insure that this is not the case.

Please feel free to contact me if you have any questions regarding these comments or if we can furnish additional information.

Sincerely,

Carl A. Smith
Director, Product Safety
and Regulatory Affairs
Agri-Products

CAS/cp

BURLINGTON NORTHERN

LAW DEPARTMENT

176 East Fifth Street
St. Paul, Minnesota 55101
Telephone (612) 298-2121

October 29, 1981

Mr. Gerald Heil
Minnesota Department of Agriculture
90 West Plato Boulevard
St. Paul, Minnesota 55107

Dear Mr. Heil:

Re: Proposed Rules Governing Storage and Handling of Liquid and Dry Commercial Fertilizers

Pursuant to your Department's notice of intent to adopt rules without public hearing governing storage and handling of liquid and dry commercial fertilizers, appearing in 6 S.R. 573, Burlington Northern Railroad Company submits the following brief comment.

We are particularly concerned about the reporting of transportation accidents which would come within the scope of the definition of "incident." This reporting requirement appears in proposed 3 MCAR §1.0325 I, for liquid fertilizers and 3 MCAR §1.0326 K, for dry fertilizers, and would require that the incident be reported to the Department of Agriculture.

It is our strong recommendation that the notification requirement be fulfilled by notifying the State Division of Emergency Services, thus providing for a simplified, consistent notification procedure, presently applicable to similar occurrences. In providing for a single state agency to notify in all such instances, we and others so affected would be relieved of the burden of having to determine which state agency to notify. This single agency notification requirement would more likely assure prompt and accurate notification. A multiplicity of agencies to notify, depending on the substance involved, would be confusing to our field personnel and may result in failing to meet that objective.

If you have any questions or comments on this proposed change please advise. My telephone number is (612) 298-2012.

Very truly yours,

Barry McGrath
Assistant General Counsel

BMcG/ghc,7

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

In the Matter of the Proposed
Adoption of Rules Governing
the Storage and Handling of
Dry Commercial Fertilizer

FINDINGS OF FACT
AND CONCLUSIONS

The Department of Agriculture (MDA) proposes to adopt the above-entitled rules. The adoption of these rules was determined to be noncontroversial and the procedures set forth in Minnesota Statutes, Section 15.0412, Subdivision 4h (1980) were followed. On October 5th, 1981, the Department published notice in the State Register of the intent to adopt these rules without public hearing. For 30 days, persons interested in the rules had the opportunity to submit oral or written comments. No written requests were received for a public hearing on the proposed rules. However, written comments were received from several respondents suggesting changes or other considerations for Departmental review.

Respondents raised the issue of dual jurisdiction of these rules with those already in effect and administered by other state and federal agencies regarding the granting of permits, the inspection of facilities and the reporting of incidents. More specifically, it was alleged that the rules would duplicate inspections by both the Minnesota Pollution Control Agency (MPCA) and the Minnesota Occupational Safety and Health Administration (MOSHA) regarding review for possible hazards to the environment and human safety; would require duplicate permit applications to the MPCA and MDA before constructing a new dry fertilizer storage facility or substantially altering

an existing facility; would establish emission standards for particulate matter in duplication of APC 6, the existing rule of the MPCA governing air-borne particulate matter; would require duplicate notification of agencies in case of an incident causing a release of dry fertilizer likely to cause adverse effects on the environment; were insufficiently specific regarding the definition of what constitutes "modifying" an existing dry fertilizer storage facility; and did not set standards of sufficient clarity to guide regulated industries.

After affording interested persons an opportunity to present written and oral data, arguments, having considered the evidence submitted in regard to said rules, and having confirmed the need for the rules and the reasonableness thereof, the Department makes the following:

FINDINGS

1. The Department has found the written comments to be reasonable and helpful. In response to those comments, the Department is amending sections 3 MCAR 1.0326 (B); 3 MCAR 1.0326 (C); and 3 MCAR 1.0326 (I).

2. The issue of duplicate notification of agencies was raised in regard to incident reporting. The Department currently has a Memorandum of Agreement with all appropriate agencies and departments which specifies the Department as the lead agency in incidents of this nature. The Memorandum includes the Department of Public Safety, Division of Emergency Services. To implement the objectives of this Memorandum as well as to avoid confusion and duplication, the proposed rule is being amended to require the posting of

incident notification signs which will display emergency numbers to be called in case of an incident (3 MCAR 1.0326 (I) and (B) 4). The posting of these signs at each facility will prevent confusion and burdensome duplication in this matter, assuring prompt and accurate reporting of incidents.

Section 1.0326 (I) is amended as follows:

I. Each storage container shall be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of its contents. The incident notification sign issued by the Department shall be posted in a conspicuous place.

3. One respondent was particularly concerned about the reporting of transportation incidents. It is the Department's intent to notify local and state law enforcement agencies, which would be first to respond in such cases, of proper reporting procedures. This notification, along with the Memorandum that exists among state agencies, should prevent confusion and duplication of transportation incident reporting.

4. The issue of what constitutes the modification of a facility was also raised. The Department has amended 3 MCAR 1.0326 (C) to clarify the intent of this section. The new language "substantially altering" excludes normal maintenance and signifies the intent that substantial modifications need approval prior to construction.

Section 1.0326 (C) is amended as follows:

C. Approval of facility and equipment. A person beginning construction of a new dry fertilizer storage facility or substantially altering ~~modifying~~ an existing dry fertilizer storage facility shall first obtain the approval of the Commissioner ~~of Agriculture or his designee.~~

5. New definitions are added to the rules subsequent to the amendments that were made to 3 MCAR 1.0326 (C) and 3 MCAR 1.0326 (I). Definitions 4 and 5 are subsequently renumbered 5 and 6.

Section 1.0326 (B) is amended as follows:

4. "Incident notification sign" means a sign issued by the Department displaying emergency telephone numbers to be called in case of an incident.

7. "Substantially altering" means the modification of a dry fertilizer storage facility by adding additional storage containers, changing existing storage containers, or by changing the mixing, blending, weighing, or handling equipment. This does not include normal routine maintenance of existing storage containers or mixing, blending, weighing, and handling equipment.

6. The lack of specificity regarding the definition of liquid fertilizer is not germane to these rules.

7. The Department finds the following regarding the other issues raised by the respondents:

A. In the matter of the general allegation of dual jurisdiction, the Department is unaware of other state or federal rules regarding the granting of permits and the inspection of facilities involved in the storage and handling of dry fertilizers. Moreover, Minnesota Statutes Section 17.725 grants the Commissioner of Agriculture the authority to regulate the storage and handling of dry commercial fertilizer facilities.

B. The potential for duplicate inspections by both the MDA and the MOSHA is not germane to these rules. 3 MCAR 1.0326 governs equipment and operating procedures; MOSHA rules govern occupational safety, or the safeguards to the health and safety of workers. The two rules are distinctly different in purpose and application.

C. There are no duplicate permit requirements by the MDA and MPCA prior to the construction of a new facility or the substantial alteration of an existing one. The Department makes this conclusion since no other rules were cited in the written comments or found by the Department that require the issuance of permits prior to the construction or substantial alteration of existing dry commercial fertilizer facilities. Of the rules cited in the written comments, MPCA Rule APC 29 establishes air quality standards for grain handling facilities. However, the definition of "grain handling facility" does not include dry fertilizer facilities. MPCA Rule APC 6 is also an air quality rule. Neither rule has requirements regarding the granting of permits prior to the construction or modification of dry fertilizer storage and handling facilities.

In regard to inspections, MPCA Rule APC 29 applies only to grain handling facilities. APC 6 is vague and does not define the extent of its applicability. Moreover, it does not contain any reference to statutory authority. Therefore, its the Department's conclusion that the MPCA does not have rules which govern facilities that store and handle dry commercial fertilizer. Moreover, the MPCA has reviewed these rules and has not raised the issue of duplication of either the

issuance of permits or the inspection of facilities. In the absence of evidence to the contrary, the Department concludes the proposed rules are not duplicative or redundant.

D. The provisions of subsection G neither duplicate existing MPCA air quality rules nor establish specific standards regarding emissions of particulate matter. The existing MPCA rule (APC 6) cited in the comments does not have specific performance standards, has no statutory citation as to authority, is vague and does not define the limits of applicability. Moreover, the rule governing grain handling facilities (APC 29), which does have specific performance standards, does not apply to dry commercial fertilizer facilities. The Department has concluded that the proposed rules will not duplicate APC 6 and APC 29.

The Department did not attempt to establish standards of performance in this matter because: 1) it is not aware of specific standards that exist elsewhere outside of Minnesota which could be used as models; 2) it is unaware of research or data that could be used as the basis of such standards; and 3) the number, diversity, and geographic dispersion of facilities make it almost impossible to establish and enforce reasonable standards.

The proposed rule does grant the Department administrative discretion. In the absence of adequate models or standards and research, the Department concludes the proposed rule is adequate and reasonable until such time as administrative experience demonstrates that more definitive standards are needed and can be reasonably established and enforced.

CONCLUSIONS

1. That the Department has fulfilled all substantive and procedural requirements of law and rule in this matter.

2. That the Department has demonstrated its statutory authority to adopt the proposed rules.

3. That the Department has demonstrated the need for and the reasonableness of the rules as proposed, with the aforementioned amendments.

4. That the Department has adequately considered the written comments submitted regarding these rules.

NOW, THEREFORE, THE DEPARTMENT will proceed to adopt these rules as proposed, with the aforestated amendments.

STATE OF MINNESOTA

COMMISSIONER OF AGRICULTURE

STATE REGISTER

STATE OF MINNESOTA

AUG 1982



VOLUME 7, NUMBER 9

August 30, 1982

Pages 241-272

PROPOSED RULES

Pursuant to Minn. Laws of 1980, § 15.0412, subd. 4h, an agency may propose to adopt, amend, suspend or repeal rules without first holding a public hearing, as long as the agency determines that the rules will be noncontroversial in nature. The agency must first publish a notice of intent to adopt rules without a public hearing, together with the proposed rules, in the *State Register*. The notice must advise the public:

1. that they have 30 days in which to submit comment on the proposed rules;
2. that no public hearing will be held unless seven or more persons make a written request for a hearing within the 30-day comment period;
3. of the manner in which persons shall request a hearing on the proposed rules;

and

4. that the rule may be modified if modifications are supported by the data and views submitted.

If, during the 30-day comment period, seven or more persons submit to the agency a written request for a hearing of the proposed rules, the agency must proceed under the provisions of § 15.0412, subds. 4 through 4g, which state that if an agency decides to hold a public hearing, it must publish in the *State Register* a notice of its intent to do so. This notice must appear at least 30 days prior to the date set for the hearing, along with the full text of the proposed rules. (If the agency has followed the provisions of subd. 4h and has already published the proposed rules, a citation to the prior publication may be substituted for republication.)

Pursuant to Minn. Stat. § 15.0412, subd. 5, when a statute, federal law or court order to adopt, suspend or repeal a rule does not allow time for the usual rulemaking process, temporary rules may be proposed. Proposed temporary rules are published in the *State Register*, and for at least 20 days thereafter, interested persons may submit data and views in writing to the proposing agency.

Department of Agriculture
Agronomy Services Division

Notice of Withdrawal of Proposed Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizer

The rules proposed and published at *State Register*, Volume 6, Number 14, p. 573, October 5th, 1981 (6 S.R. 573) are withdrawn in their entirety by the department. The Attorney General has ruled that the procedures outlined in *Minn. Stat.* § 15.0412, subd. 4h, may not be used to promulgate these rules. The department intends to republish the rules and promulgate them according to the procedures contained in *Minn. Stat.* § 15.0412, subd. 4.

Minnesota Housing Finance Agency

Notice of Correction of Proposed Rules Relating to Income Limits for the Home Improvement Loan Program Without a Public Hearing

The notice of intent of proposed rules amending provisions relating to downpayments under the Homeownership Assistance Fund without a public hearing published on August 9, 1982, at 7 S.R. 165 did not include certain information required in the notice by the rules adopted by the Attorney General. Accordingly, the corrected notice is published below. The rules are identical to those printed in the original notice.

Notice of Intent to Adopt Rules without a Public Hearing

Notice is hereby given that the Minnesota Housing Finance Agency ("agency") proposes to adopt the above-entitled rules without a public hearing. The agency has determined that the proposed adoption of these rules will be noncontroversial in nature and has elected to follow the procedures set forth in *Minn. Stat.* § 15.041, subd. 4h (1980).

Persons interested in these rules shall have 30 days to submit comments on the proposed rules. The proposed rules may be modified if the modifications are supported by the data and views submitted to the agency and do not result in a substantial change in the proposed language.

Unless seven or more persons submit written requests for a public hearing on the proposed rules within the 30-day comment period, a public hearing will not be held. In the event a public hearing is required, the agency will proceed according to the provisions of *Minn. Stat.* § 15.0412, subds. 4-4f. If a public hearing is requested, identification of the particular objection, the suggested modifications to the proposed language, and the reasons or data relied on to support the suggested modifications is desired.

Persons who wish to submit comments or a written request for a public hearing should submit such comments or request to:

STATE OF MINNESOTA

DEPARTMENT OF AGRICULTURE

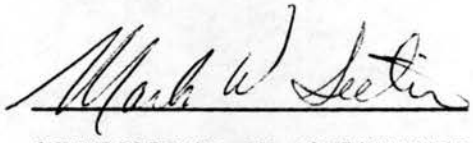
In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325 - 1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

ORDER FOR HEARING

IT IS ORDERED this 28th day of October, 1982, that a public hearing on the proposed amendments to the rules and the proposed rules captioned above be held in Conference Room A, Minnesota Department of Agriculture Building, 90 West Plato Boulevard, St. Paul, MN, on December 21, 1982, commencing at 9:00 A.M., and continuing until all representatives of associations or other interested groups or persons have had an opportunity to be heard.

IT IS FURTHER ORDERED, that notice of said hearing be given to all persons who have registered their names with the Minnesota Department of Agriculture for that purpose and be published in the State Register.

STATE OF MINNESOTA



COMMISSIONER OF AGRICULTURE

Minnesota Department of Agriculture

Agronomy Services Division

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325-1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

Notice of Hearing

Notice is hereby given that a public hearing will be held pursuant to Minnesota Statutes section 15.0412, subd. 4, in the above entitled matters in Conference Room A, Minnesota Department of Agriculture Building, 90 West Plato Boulevard, St. Paul, Minnesota on December 21, 1982, commencing at 9:00 A.M., and continuing until all persons or representatives of associations or other interested groups have had an opportunity to be heard concerning adoption of the proposed amendments to the rules and the proposed rules captioned above by submitting either oral or written data, statements, or arguments. Statements or briefs may be submitted without appearing at the hearing. Written materials may be submitted by mail to George Beck, State Hearing Examiner, Office of Administrative Hearings, 400 Summit Bank Building, 310 Fourth Avenue South, Minneapolis, Minnesota 55415, either before the hearing or within five working days after the close of the hearing. (The hearing examiner may extend the written comment period up to 20 calendar days at the hearing.) The proposed amendments to the rules and the proposed rules are subject to change as a result of the rule hearing process, therefore, the Department strongly urges those who may potentially be affected by the substance of the proposed amendments or the proposed rules to participate in the hearing process.

The commissioner proposes to amend rules relating to the labels and labeling of fertilizers and to adopt new rules governing the storage and handling of liquid and dry commercial fertilizers and label and labeling requirements for soil and plant amendments. The statutory authority for the commissioner to adopt these amendments and propose these new rules is contained in Minnesota Statutes section 17.725. The proposed amendments to the rules and the proposed rules relate to the matters described below.

The proposed amendments to the rules relating to labels and the labeling of fertilizers address the following subjects: requirements for the format, order and content of label information that must be affixed to the containers of all fertilizers offered for sale in Minnesota; provides for exceptions to label requirements when certain plant nutrients are not contained in the fertilizer or when the chemical forms of Nitrogen must be listed; sets the requirements for the placement of label information on the fertilizer container offered for sale; sets criteria for the label and labeling of slow released plant nutrients; provides for an exception to label requirements for fish emulsion fertilizers; permits additional plant nutrients to be guaranteed under certain circumstances and sets the format and order for their listing on the label; states the requirements for a complete application for registration of a fertilizer; and requires warning statements on labels when Boron or Molybdenum exceed certain levels.

The proposed rule governing the storage and handling of liquid commercial ferilizers addresses the following subjects: states the conditions for the commissioner's approval of new or substantially altered liquid commercial fertilizer facilities and equipment and the commissioner's intent to review

approved facilities and act in instances where there are hazards to people's lives, adjoining property or the environment; establishes the schedule under which existing liquid commercial fertilizer facilities must apply for the commissioner's approval; sets forth the conditions under which the commissioner will grant or deny variances to new, substantially altered or existing facilities; states the minimum requirements for the maintenance and operation of liquid commercial fertilizer facilities; requires that storage containers be legibly and conspicuously marked, and that an incident notification sign and an identification sign be posted for emergency purposes; provides that safeguards must be installed in order to contain liquid commercial fertilizers in the event of an incident; establishes the procedures to be followed in the event of an incident which releases liquid commercial fertilizers, including the roles of the responsible party and the department of agriculture; and exempts certain facilities storing and handling commercial fertilizer and nonstationary tanks from the provisions of this rule.

The proposed rule governing the storage and handling of dry commercial fertilizers addresses the following subjects: states the conditions for the commissioner's approval of new or substantially altered dry commercial fertilizer facilities and equipment and the commissioner's intent to review approved facilities and act in instances where there are hazards to people's lives, adjoining property or the environment; sets forth the conditions under which the commissioner will grant or deny variances to new, substantially altered or existing facilities; states the minimum requirements for the maintenance and operation of dry commercial fertilizer facilities; requires that storage containers be legibly and conspicuously marked, and that an incident notification sign be posted for emergency purposes; sets the minimum requirements under which the commissioner will permit the outside storage of

dry commercial fertilizers; and establishes the procedures to be followed in the event of an incident which releases dry commercial fertilizers, including the roles of the responsible party and the department of agriculture.

The proposed rule relating to label and labeling requirements for soil and plant amendments addresses the following subjects: sets the requirements for label information that must be affixed to the containers of all soil and plant amendments offered for sale in Minnesota; provides an exemption from these label information requirements for soil and plant amendments or sewage sludge offered for sale that contain fertilizer materials; sets the requirements for the labeling of sewage sludge that is applied to a landspreading site in Minnesota; sets the requirements for the placement of label information on the soil or plant amendment or sewage sludge container offered for sale; and states the requirements for a complete application for registration of a soil or plant amendment or sewage sludge.

Each of the four rules described above also contains a statement of the manner in which the commissioner will enforce the provisions of the rules pursuant to Minnesota Statutes section 17.728 and contains definitions of the terms used in each of the rules.

One free copy of the proposed amendments to the rules or the proposed rules is available and may be obtained by writing or telephoning Gerald Heil, Planning Division, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, Minnesota 55107, telephone (612) 296-1486. Additional copies will be available at the door on the date of the hearing.

Notice: Any person may request notification of the date on which the Hearing Examiner's Report will be available, after which date the department may not take any final action on the rules for a period of five working days. Any person may request notification of the date on which the hearing record has been submitted (or resubmitted) to the Attorney General by the department. If you desire to be so notified, you may so indicate at the hearing. After the hearing, you may request notification by sending a written request to the Hearing Examiner (in the case of the Hearing Examiner's Report), or the department (in the case of the department's submission or resubmission to the Attorney General). 8

Notice is also hereby given that 25 days prior to the hearing, a Statement of Need and Reasonableness will be available for review at the department and at the Office of Administrative Hearings. This Statement of Need and Reasonableness will include a summary of all the evidence and argument which the department anticipates presenting at the hearing justifying both the need for and the reasonableness of the proposed amendments to the rules and the proposed rules. Copies of the Statement of Need and Reasonableness may be obtained from the Office of Administrative Hearings at a minimal charge. 9

Please be advised that Minnesota Statutes Chapter 10A requires each lobbyist to register with the State Ethical Practices Board within five days after he or she commences lobbying. A lobbyist is defined in Minnesota Statutes section 10A.01, subd. 11 as any individual:

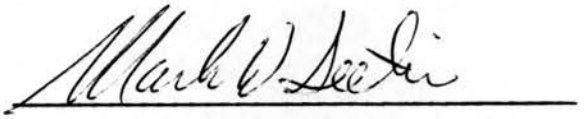
(a) Engaged for pay or other consideration, or authorized by another individual or association to spend money, who spends more than five hours in any month or more than $250, not including his own travel expenses and membership dues, in any year, for the purpose of attempting to influence 6

legislative or administrative action by communicating or urging others to communicate with public officials; or

(b) Who spends more than $250, not including his own traveling expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials. The statute provides certain exceptions. Questions should be directed to the Ethical Practices Board, 41 State Office Building, St. Paul, Minnesota 55155, telephone (612) 296-5615.

The rule hearing procedure is governed by Minnesota Statutes sections 15.0411 - 15.0417 and 15.052 and 9 MCAR sections 2.101 - 2.113 (Minnesota Code of Agency Rules). Questions relating to the rule hearing process and procedures may be directed to: Hearing Examiner, George Beck, Office of Administrative Hearings, 400 Summit Bank Building, 310 Fourth Avenue South, Minneapolis, Minnesota 55415, telephone (612) 341-7601.

STATE OF MINNESOTA



COMMISSIONER OF AGRICULTURE

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325 - 1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

AFFIDAVIT OF MAILING

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

Diane Windham, being first duly sworn, deposes and says:

That on the 12th day of November, 1982, at the City of St. Paul, County of Ramsey, State of Minnesota, he/she served the attached Notice of Hearing by depositing in the State of Minnesota Central Mail System for United States mailing at said City of St. Paul, a copy thereof, properly enveloped, with postage prepaid, on all persons and associations who have requested that their names be placed on file with the Minnesota Department of Agriculture for the purpose of receiving notice of the proposed adoption of rules by this Department.

Diane Windham

Subscribed and sworn to before me
this 12th day of November, 1982.

Christine Canaday

Christine Canaday
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
My commission expires June 25, 1986

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR SS 1.0325-1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR S 1.0328)

AFFIDAVIT OF ADDITIONAL NOTICE

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

Diane Windham, being first duly sworn, deposes and says:

That on the 12th day of November, 19 82, at the City of St. Paul, County of Ramsey, State of Minnesota, he/she served the attached Notice of Hearing by depositing in the State of Minnesota Central Mail System for United States mailing at said City of St. Paul, a copy thereof, properly enveloped, with postage prepaid, on all persons and associations named on the list also attached.

Diane Windham

Subscribed and sworn to before me
this 12th day of November, 1982.

Christine Canaday

Christine Canaday
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
My commission expires June 25, 1986

Burlington Northern Law Department
ATT: Barry McGrath
176 East 5th Street
St. Paul, Minnesota 55101

Craig Sallstrom, Executive Director
Plant Food & Chemicals Assn
1821 University Avenue, Room 253
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Edna Arvidson
Northrup King Company
Box 959
Minneapolis, Minnesota 55440

STATE OF MINNESOTA

COUNTY OF RAMSEY

CERTIFICATE

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325 - 1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

I hereby certify that the list of persons, associations, and other interested groups who have requested, pursuant to Minn. Stat. § 15.0412, subd. 4, that their names be placed on file with and maintained by the Minnesota Department of Agriculture for the purpose of receiving notice of the proposed adoption of rules by this Department is accurate and complete as of 9:00 a.m., this 12th day of November, 1982.

Glenn J Hall

Minnesota Department of Agriculture
Agronomy Services Division

Proposed Amendments to Rules Governing Fertilizer Labels and Labeling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendment Labels and Labeling Requirements

Notice of Hearing

Notice is hereby given that a public hearing will be held pursuant to Minnesota Statutes, section 15.0412, subd. 4, in the above entitled matters in Conference Room A, Minnesota Department of Agriculture Building, 90 West Plato Boulevard, St. Paul, Minnesota on December 21, 1982, commencing at 9:00 a.m., and continuing until all persons or representatives of associations or other interested groups have had an opportunity to be heard concerning adoption of the proposed amendments to the rules and the proposed rules captioned above by submitting either oral or written data, statements, or arguments. Statements or briefs may be submitted without appearing at the hearing. Written materials may be submitted by mail to George Beck, State Hearing Examiner, Office of Administrative Hearings, 400 Summit Bank Building, 310 Fourth Avenue South, Minneapolis, Minnesota 55415, either before the hearing or within five working days after the close of the hearing. (The hearing examiner may extend the written comment period up to 20 calendar days at the hearing.) The proposed amendments to the rules and the proposed rules are subject to change as a result of the rule hearing process, therefore, the department strongly urges those who may potentially be affected by the substance of the proposed amendments or the proposed rules to participate in the hearing process.

The commissioner proposes to amend rules relating to the labels and labeling of fertilizers and to adopt new rules governing the storage and handling of liquid and dry commercial fertilizers and label and labeling requirements for soil and plant amendments. The statutory authority for the commissioner to adopt these amendments and propose these new rules is contained in Minnesota Statutes, section 17.725. The proposed amendments to the rules and the proposed rules relate to the matters described below.

The proposed amendments to the rules relating to labels and the labeling of fertilizers address the following subjects: requirements for the format, order and content of label information that must be affixed to the containers of all fertilizers offered for sale in Minnesota; provides for exceptions to label requirements when certain plant nutrients are not contained in the fertilizer or when the chemical plant nutrients are not contained in the fertilizer or when the chemical forms of Nitrogen must be listed; sets the requirements for the placement of label information on the fertilizer container offered for sale; sets criteria for the label and labeling of slow released plant nutrients; provides for an exception to label requirements for fish emulsion fertilizers; permits additional plant nutrients to be guaranteed under certain circumstances and sets the format and order for their listing on the label; states the requirements for a complete application for registration of a fertilizer; and requires warning statements on labels when Boron or Molybdenum exceed certain levels.

The proposed rule governing the storage and handling of liquid commercial fertilizers addresses the following subjects: states the conditions for the commissioner's approval of new or substantially altered liquid commercial fertilizer facilities and equipment and the commissioner's intent to review approved facilities and act in instances where there are hazards to people's lives, adjoining property or the environment; establishes the schedule under which existing liquid commercial fertilizer facilities must apply for the commissioner's approval; sets forth the conditions under which the commissioner will grant or deny variances to new, substantially altered or existing facilities; states the minimum requirements for the maintenance and operation of liquid commerical fertilizer facilities; requires that storage containers be legibly and conspicuously marked, and that an incident notification sign and an identification sign be posted for emergency purposes; provides that safeguards must be installed in order to contain liquid commercial fertilizers in the event of an incident; establishes the procedures to be followed in the event of an incident which releases liquid commercial fertilizers, including the roles of the responsible party and the department of agriculture; and exempts certain facilities storing and handling commercial fertilizer and nonstationary tanks from the provisions of this rule.

The proposed rule governing the storage and handling of dry commercial fertilizers addresses the following subjects: states

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

the conditions for the commissioner's approval of new or substantially altered dry commercial fertilizer facilities and equipment and the commissioner's intent to review approved facilities and act in instances where there are hazards to people's lives, adjoining property or the environment; sets forth the conditions under which the commissioner will grant or deny variances to new, substantially altered or existing facilities; states the minimum requirements for the maintenance and operation of dry commercial fertilizer facilities; requires that storage containers be legibly and conspicuously marked, and that an incident notification sign be posted for emergency purposes; sets the minimum requirements under which the commissioner will permit the outside storage of dry commercial fertilizers; and establishes the procedures to be followed in the event of an incident which releases dry commercial fertilizers, including the roles of the responsible party and the Department of Agriculture.

The proposed rule relating to label and labeling requirements for soil and plant amendments addresses the following subjects: sets the requirements for label information that must be affixed to the containers of all soil and plant amendments offered for sale in Minnesota; provides an exemption from these label information requirements for soil and plant amendments or sewage sludge offered for sale that contain fertilizer materials; sets the requirements for the labeling of sewage sludge that is applied to a landspreading site in Minnesota; sets the requirements for the placement of label information on the soil or plant amendment or sewage sludge container offered for sale; and states the requirements for a complete application for registration of a soil or plant amendment or sewage sludge.

Each of the four rules described above also contains a statement of the manner in which the commissioner will enforce the provisions of the rules pursuant to Minnesota Statutes, section 17.728 and contains definitions of the terms used in each of the rules.

One free copy of the proposed amendments to the rules or the proposed rules is available and may be obtained by writing or telephoning Gerald Heil, Planning Division, Minnesota Department of Agriculture, 90 West Plato Boulevard, St. Paul, Minnesota 55107, telephone (612) 296-1486. Additional copies will be available at the door on the date of the hearing.

Notice: Any person may request notification of the date on which the hearing examiner's report will be available, after which date the department may not take any final action on the rules for a period of five working days. Any person may request notification of the date on which the hearing record has been submitted (or resubmitted) to the Attorney General by the department. If you desire to be so notified, you may so indicate at the hearing. After the hearing, you may request notification by sending a written request to the hearing examiner (in the case of the hearing examiner's report), or the department (in the case of the department's submission or resubmission to the Attorney General).

Notice is also hereby given that 25 days prior to the hearing, a statement of need and reasonableness will be available for review at the department and at the Office of Administrative Hearings. This statement of need and reasonableness will include a summary of all the evidence and argument which the department anticipates presenting at the hearing justifying both the need for and the reasonableness of the proposed amendments to the rules and the proposed rules. Copies of the statement of need and reasonableness may be obtained from the Office of Administrative Hearings at a minimal charge.

Please be advised that Minnesota Statutes Chapter 10A requires each lobbyist to register with the State Ethical Practices Board within five days after he or she commences lobbying. A lobbyist is defined in Minnesota Statutes section 10A.01, subd. 11 as any individual:

(a) Engaged for pay or other consideration, or authorized by another individual or association to spend money, who spends more than five hours in any month or more than $250, not including *his own* travel expenses and membership dues, in any year, for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials; or

(b) Who spends more than $250, not including *his own* traveling expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials. The statute provides certain exceptions. Questions should be directed to the Ethical Practices Board, 41 State Office Building, St. Paul, Minnesota 55155, telephone (612) 296-5615.

The rule hearing procedure is governed by Minnesota Statutes sections 15.0411-15.0417 and 15.052 and 9 MCAR sections 2.101-2.113 (Minnesota Code of Agency Rules). Questions relating to the rule hearing process and procedures may be directed to: Hearing Examiner, George Beck, Office of Administrative Hearings, 400 Summit Bank Building, 310 Fourth Avenue South, Minneapolis, Minnesota 55415, telephone (612) 341-7601.

Mark W. Seetin
Commissioner of Agriculture

Rule as Proposed (all new material)

3 MCAR § 1.0325 Liquid commercial fertilizers.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725, to govern the storage and handling of liquid commercial fertilizer used for agricultural purposes.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "commercial fertilizer," "commissioner," "grade," "guaranteed analysis," and "person" have the meanings given in Minnesota Statutes, section 17.713.

1. "Appurtenances" means valves, pumps, fittings, and metering or dispensing devices.

2. "Department" means the Department of Agriculture.

3. "Facility" means a place where liquid commercial fertilizer is stored, mixed, blended, weighed, or handled.

4. "Incident" means a flood, fire, tornado, transportation accident, storage container rupture or leak, or other release of liquid commercial fertilizer, whether accidental or not, which is likely to cause a hazard to people's lives, adjoining property, or the environment.

5. "Incident notification sign" means a sign issued by the department displaying the emergency telephone numbers to be called in case of an incident.

6. "Liquid commercial fertilizer" means either mixed fertilizer or fertilizer materials distributed in a fluid, nonpackaged form.

7. "Responsible party" means the person who has direct custody or control of liquid commercial fertilizer at the time of an incident.

8. "Safeguard" means a device, structure, or system or a combination of these designed to prevent the escape or movement of a liquid commercial fertilizer from the place it is stored which might result in the pollution of any surface or ground waters.

9. "Storage container" means a tank in which liquid commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

10. "Substantially altering" means modifying a facility by adding additional safeguards or storage containers, or changing existing storage containers, safeguards, appurtenances, or piping. This does not include routine maintenance of existing safeguards, storage containers, appurtenances, and piping or of existing mixing, blending, weighing, and handling equipment.

C. Approval of facility and equipment. A person beginning construction of a new facility or substantially altering an existing facility shall first obtain the approval of the commissioner. The application for approval must be made on forms provided by the commissioner. The commissioner shall approve the application when inspection of the facility and review of the application demonstrate that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property, and the environment.

The commissioner shall review approved facilities if the commissioner has reason to believe that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property, or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property, or the environment do exist, the commissioner shall proceed in accordance with Minnesota Statutes, section 17.728.

D. Previously established facilities. The person who operates a facility which was established prior to the effective date of this rule including persons who were granted a permit by the Pollution Control Agency, must obtain the commissioner's approval of the facility and equipment according to the following schedule:

1. The person who operates a facility established prior to January 1, 1965, must seek the approval of the commissioner within one year of the effective date of this rule.

2. The person who operates a facility established from January 1, 1965, to December 31, 1973, must seek the approval of the commissioner within two years of the effective date of this rule.

3. The person who operates a facility established from January 1, 1974, to May 31, 1975, must seek the approval of the commissioner within three years of the effective date of this rule.

4. The person who operates a facility established from June 1, 1975, to December 31, 1977, must seek the approval of the commissioner within four years of the effective date of this rule.

5. The person who operates a facility established from January 1, 1978, to December 31, 1979, must seek the approval of the commissioner within five years of the effective date of this rule.

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6. The person who operates a facility established from January 1, 1980, to the effective date of this rule must seek the approval of the commissioner within six years of the effective date of this rule.

E. Variances. Upon receipt of a written request, the department shall grant a variance from this rule when the request shows that compliance with this rule would cause unreasonable economic hardship to the requester and that the requested use would not constitute a hazard to people's lives, adjoining property, or the environment. The department shall set forth in writing its reasons for granting or denying a requested variance within 60 days of the request.

F. Maintenance and operations.

1. Safeguards, storage containers, and mixing, blending, weighing, and handling equipment must be maintained and operated in a manner which will prevent the escape of any liquid commercial fertilizer from the facility.

2. Adequate provisions must be made to protect all above-ground piping from physical damage that might result from moving machinery, equipment, and vehicles.

3. Main valves must be located as near to the storage container as possible and must be either closed and made inoperative when the facility is unattended or protected against tampering by adequate fencing.

4. Appurtenances and storage containers must be properly maintained, protected against rust, and painted to prevent corrosion and leakage.

5. Storage container areas must be kept free of clutter and ignitible materials including weeds and long dry grass.

G. Safeguards. Persons storing liquid commercial fertilizers in storage containers shall provide safeguards for containment at least equal to the holding capacity of the largest single storage container.

H. Markings.

1. Each storage container must be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of the contents of the storage container.

2. An identification sign must be 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.

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

I. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other state agencies with jurisdiction regarding the incident. The responsible party shall take appropriate action to contain or clean up the results of the incident. The department shall be the lead state agency for making decisions involving the clean-up or containment operations and shall initiate those operations necessary to prevent hazards to people's lives, adjoining property, or the environment. By initiating clean-up or containment operations, the department does not assume any liability for costs in addition to that prescribed or imposed by law.

J. Exempt facilities. This rule does not apply to anhydrous ammonia facilities, or to portable or nonstationary tanks.

K. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that the storage and handling of liquid commercial fertilizer does not meet the provisions in this rule.

3 MCAR § 1.0326 Dry commercial fertilizers.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725, to govern the storage and handling of dry commercial fertilizer used for agricultural purposes.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "commercial fertilizer," "commissioner," "grade," "guaranteed analysis," and "person" have the meanings given in Minnesota Statutes, section 17.713.

1. "Department" means the Department of Agriculture.

2. "Dry commercial fertilizer" means either mixed fertilizer or fertilizer materials distributed in a nonfluid, nonpackaged form.

3. "Facility" means a place where dry commercial fertilizer is stored, mixed, blended, weighed, or handled.

4. "Incident" means a flood, fire, tornado, transportation accident, or other event causing a release of dry commercial fertilizer, whether accidental or not, which is likely to cause a hazard to people's lives, adjoining property, or the environment.

5. "Incident notification sign" means a sign issued by the department displaying emergency telephone numbers to be called in the case of an incident.

6. "Responsible party" means the person who has direct custody or control of the dry commercial fertilizer at the time of an incident.

7. "Safeguard" means a device, structure, or system or a combination of these designed to prevent the escape or movement of a dry commercial fertilizer from the place it is stored which might result in the pollution of any surface or ground waters.

8. "Storage container" means a tank or bin in which dry commercial fertilizer is stored. This does not include delivery equipment unless the delivery equipment is used for storage.

9. "Substantially altering" means modifying a facility by adding additional safeguards or storage containers, or by changing existing safeguards or storage containers. This does not include routine maintenance of existing safeguards or storage containers or of existing mixing, blending, weighing, and handling equipment.

C. Approval of facility and equipment. A person beginning construction of a new facility or substantially altering an existing facility shall first obtain the approval of the commissioner. The application for approval must be made on forms provided by the commissioner. The commissioner shall approve the application when inspection of the facility and review of the application demonstrate that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property, and the environment.

The commissioner shall review approved facilities if the commissioner has reason to believe that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property, or the environment. Upon determination by the commissioner that hazards to people's lives, adjoining property, or the environment do exist, the commissioner shall proceed in accordance with Minnesota Statutes, section 17.728.

D. Variances. Upon receipt of a written request, the department shall grant a variance from this rule when the request shows that compliance with this rule would cause unreasonable economic hardship to the requester and that the requested use would not constitute a hazard to people's lives, adjoining property, or the environment. The department shall set forth in writing its reasons for granting or denying a requested variance within 60 days of the request.

E. Maintenance and operations.

1. Safeguards, storage containers, and mixing, blending, weighing, and handling equipment must be maintained and operated in a manner which will prevent avoidable amounts of particulate matter from leaving the facility.

This requirement does not apply to facilities governed by this rule which were established prior to the date of its adoption unless the existing facility, without modification, would result in a hazard to people's lives, adjoining property, or the environment.

2. Storage containers must be maintained to prevent cross contamination of various dry commercial fertilizers.

3. Storage container areas must be kept free of clutter and ignitable materials including weeds and long dry grass.

F. Markings.

1. Each storage container must be labeled in a clearly legible and conspicuous manner with the appropriate grade or guaranteed analysis of the contents of the storage container.

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

G. Outside storage. Outside dry commercial fertilizer storage piles may not be located in areas where surface water runoff could enter storm sewers, sanitary sewers, or other surface or ground waters.

H. Incidents. A person involved in or responsible for an incident shall report the incident to the department. The department shall immediately notify other state agencies with jurisdiction regarding the incident. The responsible party shall take appropriate action to contain or clean up the results of the incident. The department shall be the lead state agency for making decisions involving clean-up or containment operations and shall initiate those operations necessary to prevent hazards to people's lives, adjoining property, or the environment. By initiating clean-up or containment operations, the department does not assume any liability for costs in addition to that prescribed or imposed by law.

I. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that the storage or handling of dry commercial fertilizer does not meet the provisions in this rule.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Rule as Proposed

~~Agr 322 Trace Minerals in Commercial and Specialty Fertilizers~~

3 MCAR § 1.0327 Fertilizer labels and labeling requirements.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725 to prescribe conditions for labels and procedures for labeling fertilizers.

B. Definitions. For the purposes of this rule, the terms defined in this part have the meanings given them, and "brand," "commercial fertilizer," "commissioner," "fertilizer material," "grade," "guaranteed analysis," "guarantor," "label," "labeling," "mixed fertilizer," "organic," and "specialty fertilizer," have the meanings given in Minnesota Statutes, section 17.713.

1. "Department" means the Department of Agriculture.

2. "Fertilizer" means a commercial fertilizer or a specialty fertilizer.

3. "Plant nutrient" has the meaning given to "plant food" in Minnesota Statutes, section 17.713, subdivision 15 b.

C. Label information requirements. Any fertilizer offered for sale, sold or distributed in this state, in bags or other containers, must have placed on or affixed to the container the following information in the following format and order:

1. net weight;

2. brand and grade;

3. guaranteed analysis:

Total Nitrogen (N) . . . . %

. . . . % Ammoniacal Nitrogen

. . . . % Nitrate Nitrogen

. . . . % Water Insoluble Nitrogen

. . . . % Urea Nitrogen

. . . . % Other approved and determinable forms of Nitrogen

Available Phosphoric Acid (P_2O_5) . . . . %

Soluble Potash (K_2O) . . . . %

Other plant nutrients (elemental basis) . . . . %

4. sources of plant nutrients, when shown on the label;

5. name and address of guarantor.

D. Exception to label information requirements.

1. If the percentage of any plant nutrient is zero, the plant nutrient must be omitted from the statement.

2. Chemical forms of nitrogen must be listed, without limitation, when the fertilizer is a fish emulsion or when the nitrogen is organic or slowly released. Whenever the chemical forms of nitrogen are claimed, they must be claimed in the form indicated in C.3.

E. Location of label information. For packaged fertilizers, the information required in C. must be in a readable and conspicuous form and must meet one of the following requirements:

1. appear on the front of the package;

2. occupy at least the upper one-third of either side of the package;

3. appear on the upper end of the container; or

4. be printed on a tag and attached to the package.

F. Bulk fertilizers. For bulk fertilizers, the information required in C., in written or printed form, must accompany delivery and be supplied to the purchaser at the time of delivery.

G. Slowly released plant nutrients.

1. A fertilizer label may not bear a statement that connotes or implies that certain plant nutrients contained in the fertilizer are released slowly over a period of time, unless the plant nutrients are identified and guaranteed.

2. The following types of plant nutrients may be labeled as slowly released plant nutrients:

a. water insoluble nitrogen products, such as natural organics, urea formaldehyde, IBDU and oxamide;

b. coated slow release plant nutrients such as sulfur coated urea and other encapsulated soluble fertilizers; and

c. occluded slow release plant nutrients, such as fertilizers mixed with waxes, resins or other inert materials and formed into particles.

3. The terms "water insoluble," "coated slow release" and "occluded slow release" are accepted as descriptive of these products, provided that the manufacturer can show a testing program approved by the department substantiating the claim.

4. When the nitrogen is organic and the label states the amount of organic nitrogen present in a phrase such as "nitrogen in organic form equivalent to . . . . % N," then the water insoluble nitrogen guarantee must not be less than 60 percent of the nitrogen so designated. For example, if the total nitrogen guarantee for a fertilizer is ten percent and the label states: "nitrogen in organic form equivalent to 2.5% N," then the water insoluble nitrogen guarantee must not be less than 1.5 percent (2.5% × 0.6 = 1.5%).

5. When a slowly released plant nutrient is less than 15 percent of the guarantee for total nitrogen, available phosphoric acid or soluble potash, the label may not bear a reference to those designations.

6. Until more appropriate methods are developed, Association of Official Analytical Chemists (AOAC) method number 2.074 in Official Methods of Analysis of the Association of Official Analytical Chemists (William Horwitz, ed.; 13th edition; 1980), or the appropriate AOAC method in a subsequent edition, must be used to confirm the coated slow release and occluded slow release plant nutrients and others whose slow release characteristics depend on particle size. The AOAC method number 2.072 in Official Methods of Analysis of the Association of Official Analytical Chemists (William Horwitz, ed.; 13th edition; 1980), or the appropriate AOAC method in a subsequent edition, must be used to determine the water insoluble nitrogen of organic materials.

7. The following is an example of an acceptable breakdown of nitrogen where nitrogen is the only slow release plant nutrient in the fertilizer:

Total Nitrogen (N) 22%

5.5% Ammoniacal Nitrogen

5.5% Nitrate Nitrogen

1.0% Urea Nitrogen

10.0% Coated Slow Release Urea Nitrogen

8. When two or more plant nutrients in a fertilizer are coated or occluded to obtain slow release properties, the guarantees for those plant nutrients must be shown as footnotes rather than following each plant nutrient, as indicated in the following example:

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Fertkote 10-15-20

Guaranteed Analysis

Total Nitrogen (N)*	10%
2.5% Ammoniacal Nitrogen	
2.5% Nitrate Nitrogen	
5.0% Urea Nitrogen	
Available Phosphoric Acid (P_2O_5)*	15%
Soluble Potash (K_2O)*	20%
Sulfur (S)	14%

* The nitrogen, phosphorus and potassium materials in this product have been coated to provide 9.0% coated slow release nitrogen (N), 13% coated slow release available phosphoric acid (P_2O_5), and 18% coated slow release soluble potash (K_2O).

H. Fish emulsions. The following is an example of an acceptable breakdown of nitrogen for a fish emulsion fertilizer:

Total Nitrogen (N)	5%
0% Nitrate Nitrogen	
0% Urea Nitrogen	
0.5% Ammoniacal Nitrogen	
0.5% Water Insoluble Nitrogen	
4.0% Other Water Soluble Nitrogen	

1. In the example given above, water insoluble nitrogen is guaranteed but no claims or statements, such as organic, slow acting or slow release, can be used since it is less than 15 percent of the total nitrogen.

2. Zero guarantees are not acceptable as noted in D.; however, for this specific label they will be allowed so that the term "other water soluble nitrogen" will mean nitrogen that is soluble but is not nitrate, ammoniacal or urea nitrogen.

~~(a)~~ 1. Additional ~~minerals~~ plant nutrients permitted.

~~(1)~~ 1. The commissioner will ~~grant permission to~~ accept ~~guarantee~~ guarantees only for the additional plant nutrients ~~beside Nitrogen, Phosphorus and Potassium only when the additional plant nutrients are not less than the~~ listed in this part. Any or all of these additional plant nutrients in a particular fertilizer may be guaranteed if the following minimum ~~amounts hereinafter stated~~ content requirements are met.

~~(2) Only those elements listed will be approved by the commissioner and when added in these amounts may be incorporated into the label or shown on the container.~~

~~Element~~ Plant Nutrient	Minimum Percent Allowed
Calcium (Ca)	1.00
Magnesium (Mg)	0.50
Sulfur (S)	1.00
Boron (B)	0.02
Chlorine (Cl)	0.10
Cobalt (Co)	0.0005
Copper (Cu)	0.05
Iron (Fe)	0.10
Manganese (Mn)	0.05

Molybdenum (Mo)	0.0005
Sodium (Na)	0.10
Zinc (Zn)	0.05

~~(3) Guarantees or claims for the above listed additional plant nutrients are the only ones which will be approved.~~

2. If any of the plant nutrients in 1. are guaranteed, the procedures in a.-e. must be followed for labels and labeling.

a. The plant nutrients must be listed immediately following nitrogen, phosphorus and potassium.

b. The plant nutrients must appear in the format listed in 1.

c. The plant nutrients must appear in the order listed in 1.

d. The plant nutrients must be stated on the elemental basis.

e. The percentages of each of the plant nutrients contained in the fertilizer must be stated.

3. If the minimum requirement stated in 1. is not met for a particular plant nutrient, labels and labeling for the fertilizer may not contain any statement regarding that particular plant nutrient.

~~(b)~~ J. Labeling~~, Warning Statements~~ and labels. ~~(1)~~ Proposed labeling and labels ~~and~~ with directions for use of the fertilizer shall be furnished with the application for registration ~~upon request~~ of a fertilizer.

~~(2)~~ K. Warning statements. Warning or caution statements are required on the label for any product which contains 0.03~~%~~ percent or more of Boron in a water-soluble form or 0.001~~%~~ percent or more of Molybdenum.

~~(3) Any of the above listed elements which are guaranteed shall appear in the order listed, immediately following guarantees for the primary nutrients, nitrogen, phosphorus and potassium.~~

L. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that a label or labeling of a fertilizer does not meet the provisions in this rule.

Repealer. Rules Agr 319, 320, 321, and 323 of the Department of Agriculture are repealed.

Rule as proposed (all new material)

3 MCAR § 1.0328 Soil and plant amendment labels and labeling requirements.

A. Authority and purpose. This rule is adopted by the commissioner pursuant to Minnesota Statutes, section 17.725: to prescribe conditions for the labels and procedures for labeling soil and plant amendments.

B. Definitions. For the purpose of this rule, the terms "brand," "commercial fertilizer," "commissioner," "fertilizer material," "guaranteed analysis," "guarantor," "label," "labeling," "plant amendment," "plant food," "sewage sludge," and "soil amendment" have the meanings given them in Minnesota Statutes, section 17.713.

C. Label requirements.

1. Any soil or plant amendment, except for sewage sludge, which is offered for sale, sold, or distributed in this state, in bags or other containers, must have placed on or affixed to the container the following information:

a. net weight;

b. brand name;

c. guaranteed analysis;

d. name and address of guarantor;

e. directions for the soil or plant amendment's use;

f. the soil or plant amendment's purpose or proposed use;

g. the words "NOT A PLANT FOOD PRODUCT"; and

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

h. a statement listing the common or usual English name of all ingredients used in manufacturing or blending the soil or plant amendment.

2. The label requirements in C.1.g. do not apply to soil or plant amendments or sewage sludge offered for sale that contain fertilizer materials.

a. If the soil or plant amendment or sewage sludge contains fertilizer materials that meet the plant food content requirements of Minnesota Statutes, section 17.721, the fertilizer materials must be guaranteed and labeled in accordance with Minnesota Statutes, sections 17.711 to 17.729 and 3 MCAR § 1.0327.

b. If the soil or plant amendment or sewage sludge contains fertilizer materials that do not meet the plant food content requirements of Minnesota Statutes, section 17.721, the fertilizer materials may not be guaranteed and must be listed in a caution or warning statement with appropriate percentages of each plant food.

The following is an example of an acceptable caution or warning statement for a soil or plant amendment offered for sale containing fertilizer materials below the plant food requirements of 3 MCAR § 1.0327:

"CAUTION. This product may contain _____ percent nitrogen, _____ percent calcium, and _____ percent zinc. This information should be taken into consideration when the product is used in conjunction with commercial fertilizer or when sensitive crops or plants are involved."

3. Sewage sludge which is applied to a landspreading site must have a sewage sludge analysis containing the information listed in a. to g. All analytical values except pH and total solids must be recorded on a dry weight basis. The most recent sewage sludge analysis, in written or printed form, must be supplied to the owner, renter, or lessee of a landspreading site before sewage sludge is spread.

a. Percentage of total solids.

b. Volatile solids as a percentage of total solids.

c. pH.

d. Percentage of nitrogen, including the percentages of kjeldahl, ammonia, and in the case of aerobically digested and composted sewage sludge, nitrate.

e. Phosphorus and potassium, expressed as percentages of available phosphoric acid (P_2O_5) and soluble potash (K_2O).

f. Total weight of heavy metals, including milligrams per kilogram of zinc, copper, lead, nickel, cadmium, chromium, mercury, and molybdenum.

g. Polycholorinated biphenyls expressed as milligrams per kilogram.

4. For packaged soil or plant amendments or sewage sludge offered for sale, the information required in 1. or 2. must be in a readable and conspicuous form and must meet one of the following requirements:

a. appear on the front of the package;

b. occupy at least the upper one-third of either side of the package;

c. appear on the upper end of the container; or

d. be printed on a tag and attached to the package.

5. For bulk soil or plant amendments or sewage sludge offered for sale, the information required in 1. or 2., in written or printed form, must accompany delivery and be supplied to the purchaser at the time of delivery.

D. Labeling and labels. Proposed labeling and labels with directions for use of the soil or plant amendment must be furnished with an application for registration of a soil or plant amendment.

E. Enforcement. The commissioner shall proceed in accordance with Minnesota Statutes, section 17.728 upon satisfactory evidence that a label or labeling of a soil or plant amendment or sewage sludge does not meet the provisions in this rule.

JAN 17 1983

STATE OF MINNESOTA

OFFICE OF ADMINISTRATIVE HEARINGS

400 SUMMIT BANK BUILDING
310 SOUTH FOURTH AVENUE
MINNEAPOLIS, MINNESOTA 55415
(612) 341-7600

January 13, 1983

Commissioner Jim Nichols
Department of Agriculture
90 West Plato Boulevard
St. Paul, MN 55107

Re: In the Matter of the Adoption of Proposed Amendments to Rules Governing Fertilizer Labels and Labelling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendments Labels and Labelling Requirements; OAH Docket No. AGR-83-003-AK.

Dear Commissioner Seetin:

Enclosed and served upon you by mail, please find the Report of the Hearing Examiner and the Report of the Chief Hearing Examiner in the above-entitled matter. I also enclose the official record, and I am closing our file in this matter.

Yours very truly,

Allan W. Klein

ALLAN W. KLEIN
Hearing Examiner

Telephone: 612/341-7609

AWK:dld
Encl.

AGR-83-003-AK

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA DEPARTMENT OF AGRICULTURE

In the Matter of the Adoption of Proposed Amendments to Rules Governing Fertilizer Labels and Labelling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendments Labels and Labelling Requirements.

REPORT OF THE CHIEF HEARING EXAMINER

The above-entitled matter came on for review by the Chief Hearing Examiner pursuant to the provisions of Minn. Stat. § 14.15, subds. 3 and 4 (1982) which provide in part:

> If the [hearing examiner's] report contains a finding that the proposed rule is substantially different from that which was proposed at the public hearing, or that the agency has not met the requirements of sections 14.13 to 14.18 it shall be submitted to the chief hearing examiner for approval. If the chief hearing examiner approves the finding of the hearing examiner, he shall advise the agency of actions which will correct the defects, and the agency shall not adopt the rule until the chief hearing examiner determines that the defects have been corrected. If the chief hearing examiner determines that the need for and reasonableness of the rule has not been established pursuant to section 14.14, subdivision 2, and if the agency does not elect to follow the suggested actions of the hearing examiner to correct that defect, then the agency shall submit the proposed rule to the legislative commission to review administrative rules for the commission's advice and comment. The agency shall not proceed to adopt the rule until it has received and considered the advice of the commission; provided, that the agency is not required to delay adoption longer than 30 days after the commission's receipt of the agency's submission.

Based upon a review of the record in this proceeding, the Chief Hearing Examiner hereby approves the Report of the Hearing Examiner in all respects.

In order to correct the defects enumerated by the Hearing Examiner, the agency shall either take the action recommended by the Hearing Examiner or reconvene the rule hearing if appropriate. If the agency chooses to reconvene the rule hearing, it shall do so as if it is initiating a new rule hearing, complying with all substantive and procedural requirements imposed on the agency by law or rule.

If the agency chooses to take the action recommended by the Hearing Examiner, it shall, prior to submitting the rules to the Attorney General for review, submit to the Chief Hearing Examiner a copy of the rules as initially published in the State Register, a copy of the rules as proposed for final adoption in the form required by the State Register for final publication, and a copy of the agency's Findings of Fact and Order Adopting Rules. The Chief Hearing Examiner will then make a determination as to whether the defects have

been corrected and whether the modifications in the rules are substantial changes.

Should the agency make changes in the rules other than those recommended by the Hearing Examiner, it shall also, prior to submitting the rule to the Attorney General, submit the complete record to the Chief Hearing Examiner for a review in regard to substantial changes.

Dated: January 13, 1983, 1983.

DUANE R. HARVES
Chief Hearing Examiner

AGR-83-003-AK

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA DEPARTMENT OF AGRICULTURE

In the Matter of the Adoption of Proposed Amendments to Rules Governing Fertilizer Labels and Labelling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendments Labels and Labelling Requirements.

REPORT OF THE HEARING EXAMINER

The above-entitled matter came on for hearing before Allan W. Klein, Hearing Examiner, at 9:00 a.m. on December 21, 1982, at the Minnesota Department of Agriculture Building in St. Paul.

This Report is part of the rule hearing procedure required by Minn. Stat. §§ 14.01-14.51 (1982) to determine whether the proposed rules and amendments to existing rules should be adopted by the Commissioner of Agriculture.

Members of the Agency panel appearing at the hearing included: William Bulger, Director of the Department's Agronomy Services Division; Gary Braun, Fertilizer Control Specialist with the Division, and Gerald Heil, Director of the Department's Planning Division. The Department was also represented by Special Assistant Attorney General Jon K. Murphy. Jerry Johnson, representing the Minnesota Plant Food Association, was solicited to appear on behalf of the Department and did testify.

Eight people signed the hearing register, and only one person outside the Department (Mr. Johnson) testified. One set of written comments was received from the public.

The Department must wait at least five working days before taking any final action on the rules; during that period, this Report must be made available to all interested persons upon request.

Pursuant to the provisions of Minn. Stat. § 14.15, subd. 3 (1982), this Report has been submitted to the Chief Hearing Examiner for his approval. If the Chief Hearing Examiner approves the findings of this Report, he will advise the Department of actions which will correct the defect and the Department may not adopt the rules until the Chief Hearing Examiner determines that the defect has been corrected. However, in those instances where the Chief Hearing Examiner identifies defects which relate to the issues of need or reasonableness, the Department may either adopt the Hearing Examiner's recommendations to cure the defects or, in the alternative, if the Department does not elect to adopt the recommendations, it may submit the proposed rule to the Legislative Commission to Review Administrative Rules for the Commission's advice and comment. Provisions relating to this submission to the Commission may be found in Minn. Stat. § 14.15, subd. 4 (1982).

If the Department elects to adopt the recommendations of the Hearing Examiner and makes no other changes and the Chief Hearing Examiner determines

that the defect has been corrected, then the Department shall submit the rules to the Attorney General for review of form and legality. If the Department makes changes in the rules other than those recommended by the Hearing Examiner, then it shall submit the rules, with the complete record, to the Chief Hearing Examiner for a review of the changes before adopting them and submitting them to the Attorney General. Procedures relating to this subsequent review by the Chief Hearing Examiner are set forth in Minn. Stat. § 14.16 (1982).

When the Department submits the rules to the Attorney General, it shall give notice on the day of submission to all persons who requested that they be informed of the submission to the Attorney General.

Based upon all the testimony, exhibits and written comments, the Hearing Examiner makes the following:

FINDINGS OF FACT

Procedural Requirements

1. On October 28, 1982, the Department filed the following documents with the Chief Hearing Examiner:

(a) A copy of the proposed rules.
(b) The Order for Hearing.
(c) The Notice of Hearing proposed to be issued.
(d) A Statement of the number of persons expected to attend the hearing and estimated length of the Agency's presentation.

2. On November 12, 1982, the Department mailed the Notice of Hearing to all persons and associations who had registered their names with the Department for the purpose of receiving such notice.

3. On November 15, 1982, a Notice of Hearing and a copy of the proposed rules were published at 7 State Register 733.

4. On November 24, 1982, the Department filed the following documents:

(a) The Notice of Hearing as mailed.
(b) The Agency's certification that its mailing list was accurate and complete.
(c) The Affidavit of Mailing the Notice to all persons on the Agency's list.
(d) The Statement of Need and Reasonableness.
(e) The names of Department personnel who will represent the Agency at the hearing together with the names of any other witnesses solicited by the Agency to appear on its behalf.
(f) A copy of the State Register containing the proposed rules.
(g) An Affidavit of Additional Notice.
(h) All materials received following Notices of Intent to Solicit Outside Opinion published at 4 State Register 1179 on January 21, 1980, and 4 State Register 1781 on May 12, 1980.

The documents were available for inspection at the Office of Administrative Hearings from the date of filing to the date of the hearing.

5. The record remained open through December 29, 1982 for the receipt of written comments and statements.

6. On October 5, 1981, the Department published a Notice of Intent to adopt rules without a public hearing at 6 State Register 573. Subsequent to

that publication, the Attorney General determined that due to the particular wording of Minn. Stat. § 170.725, subd. 1 (1980), a public hearing would be required. On August 30, 1982, the Department published notice of its withdrawal of the rules and intent to republish and renotice the rules for a public hearing at 7 State Register 246. At the public hearing held on December 21, 1982, the Department introduced into the record the comments which it had received as a result of the 1981 publication. In addition, the Department also supplied its responses to those comments, which are contained in Findings of Fact and Conclusions (AGR Ex. 17).

The Rules.

7. The Department's Statement of Need and Reasonableness provides adequate documentation of statutory authority, need and reasonableness of the proposed rules. The rules were modified in response to the comments noted in the preceding Finding, and only one set of objections remains.

8. In Pub. Exs. 2 and 3, Cargill, Inc., objected to the proposed rules governing the storage and handling of liquid and dry commercial fertilizer (3 MCAR S 1.0325 and 1.0326) because, Cargill alleges, the Minnesota Pollution Control Agency specifically regulates fertilizer facilities. Cargill alleges that this results in duplicating jurisdictions for the fertilizer industry. In addition, Cargill believes that the MPCA rules are more specific than the proposed Department of Agriculture rules, and therefore, give greater certainty to the regulated industry.

9. In the area of dry commercial fertilizer, Cargill specifically refers to Minn. Rule APC-3, APC-5, APC-6, APC-11, and APC-19. A review of those PCA rules indicates that their primary thrust, in the area of fertilizer facilities, is regulation of particulate emissions into the atmosphere. A secondary matter (raised by APC-19), is regulation of emissions from vehicular traffic generated by the facility and its users.

In contrast, the primary thrust of the Department's proposed rule is the integrity of the fertilizer (storage bins, for example, must be maintained to prevent cross-contamination) and responses to "incidents" (such as flood, fire or tornado) causing releases of fertilizer which may be hazardous to life, property or the environment.

There are some overlaps. For example, proposed Rule 1.0326 E.1. requires that storage, mixing and handling equipment must be operated in a manner which will "prevent avoidable amounts of particulate matter from leaving the facility". Minn. Rule APC-6(a) prohibits the handling or storage of any material in a manner "which may allow avoidable amounts of particulate matter to become air-borne". In addition, both existing PCA rules and the proposed Department rules may require permits, inspections, and reporting of incidents, depending upon the applicability of the PCA rules to individual facilities. However, in at least one case, that of incident reporting, both the statute and the proposed rules make it clear that the Department of Agriculture is to be the "lead agency" [Minn. Stat. § 17.7285 (1982)] and the Department has entered into a Memorandum of Understanding with other state

agencies (including the PCA) to deal with the problem of duplication and coordination in the event of incidents. (See Attachment C to Statements of Need and Reasonableness for both dry and liquid fertilizers).

In summary, there is some duplication between PCA rules and the proposed rule. However, the PCA rules generally have a different thrust and purpose than does the Department's proposed rule and, in those cases where there is overlap, it is justified because of the different regulatory purposes to be served.

10. In the area of liquid commercial fertilizer, although Cargill did not supply any citations relating to overlap, the Department is aware of the potential problem generally raised by Cargill. As a part of its Statement of Need and Reasonableness for liquid commercial fertilizers, the Department appended a copy of the existing Minn. Rule WPC-4 and a proposed draft (dated November 20, 1981) of an amendment to that rule. The existing rule does substantially overlap with the proposed Department rule. However, in the 1981 draft amendment to the PCA rule, there is proposed to be added a new exemption which exempts from operation of the entire PCA rule any "liquid fertilizer tank which requires a permit issued by the Department of Agriculture . . .". The exemption goes on to provide that existing liquid fertilizer tanks that do not require a permit from the Department of Agriculture must be permitted in accordance with the PCA rule. In addition, as noted above, the problem of overlapping jurisdiction resulting from an incident is taken care of by a Memorandum of Understanding.

11. Based upon the foregoing, it is concluded that none of the commercial fertilizer rules contain unreasonable duplication.

12. One of the reasons Cargill cited for preferring the PCA rules to the proposed rules is that Cargill believes that the PCA rules are more specific. Cargill alleges that the Department's proposed rules are vague. A review of both of the proposed rules cited by Cargill indicates that there is only one area which could reasonably be described as vague. The area is Paragraph C. of both rules, and it reads substantially as follows:

> A person beginning construction of a new facility . . . shall first obtain the approval of the Commissioner. . . . The Commissioner shall approve the application when inspection of the facility and review of the application demonstrate that the proposed facility satisfies the requirements of this rule and provides safeguards to prevent hazards to people's lives, adjoining property, and the environment.
>
> The Commissioner shall review approved facilities if the Commissioner has reason to believe that existing safeguards are not sufficient to prevent hazards to people's lives, adjoining property, or the environment. Upon determination by the Commissioner that hazards to people's lives, adjoining property, or the environment do exist, the Commissioner shall proceed in accordance with Minn. Stat. § 17.728.
> (Emphasis added)

The cited statute, in subdivision 2a, provides as follows:

> 2a. The commissioner may cancel the facility and equipment approval when hazards to people's lives, adjoining property, or the environment exist, . . . no approval shall be cancelled until the person has been given an opportunity for a hearing by the commissioner.

The Statement of Need offers little insight into the vagueness problem.

The Examiner finds that the proposed language is not impermissibly vague. The rules set forth specific standards which must be met (piping must be protected from physical damage; main valves must be located near storage containers; equipment must be protected against rust by painting, etc.), and then repeat the statutory standard. The standard contained in the rules does not meet the "substantially incomprehensible" test of Exxon Corp. v. Busbee, 644 F.2d 1030, 1033 (5th Cir. 1981). As the U. S. Supreme Court stated in Colten v. Kentucky, 407 U.S. 104, 110, 92 S.Ct. 1953, 1957, 32 L.Ed. 2d. 584 (1972):

> The root of the vagueness doctrine is a rough idea of fairness. It is not a principle designed to convert into a constitutional dilemma the practical difficulties in drawing [criminal] statutes both general enough to take into account a variety of human conduct and sufficiently specific to provide fair warning that certain kinds of conduct are prohibited.

That concept was cited with approval in Thompson v. City of Minneapolis, 300 N.W.2d 763, 768 (Minn. 1980).

The standard contained in the rules is adequately specific to warn persons of the type of conduct which is proscribed. Particularly in light of the statutory requirement for a hearing prior to the cancellation of approval [Minn. Stat. § 17.728, subd. 2a (1982)], the proposed rules are not prohibitively vague.

13. As noted above, a portion of the rules do duplicate statutory language. It is found that such duplication is needed as an integral part of the rule and that it is crucial to the ability of affected persons to comprehend the meaning and effect of the rules.

14. At the start of the hearing, the Agency proposed four changes to 3 MCAR § 1.0327. The changes are set forth in AGR Ex. 18. The Agency justified each of the changes at the hearing. The only person testifying at the hearing supported the changes. The Examiner has compared the changes with the standards set forth in 9 MCAR § 2.111 and finds that none of them are "substantial" changes.

15. One matter which was not raised by any person, but which is apparent from an examination of the rules, is that proposed Rules 3 MCAR S 1.0325 and 1.0326 both contain a procedure for permit applications which provides that "the application for approval must be made on forms provided by the Commissioner." This requirement is also included in Minn. Stat. § 17.7155 (1982). However, neither of the proposed rules specifies what information must be contained in the application. In both cases, the Statements of Need and Reasonableness have appended to them forms (in each case labelled Attachment A) which the Statements indicate contain "the type of information the Department will require of applicants".

Although there was no objection to the forms appended to the Statements, there is no legal or procedural requirement that the Department adhere to those versions of the forms. It would be possible for the Department to radically alter them at any time. Radical alterations could cause substantial

hardship to applicants. Therefore, it is found that the failure to specify, in the rule, what information will be required from applicants does implicitly grant to the Commissioner impermissibly unrestricted discretion. Such discretion is contrary to the very definition of a rule within the context of the Administrative Procedure Act: The provisions of the Act must be followed in the case of ". . . every agency statement of general applicability and future effect adopted to implement or make specific a law enforced." Therefore, failure to define what kinds of information will be required by the application constitutes a violation of a substantive requirement of law. Without some change, both 3 MCAR §§ 1.0325 C. and 1.0326 C. are invalid.

This defect, however, is easily cured because the Department appended their proposed application forms to the Statements of Need and Reasonableness in each case. Therefore, they were available for public scrutiny and comment. There was no public objection to them. The defect could be cured in one of two ways. First, the rules could be amended to include a laundry list of the information which the Department seeks to elicit in its application forms. In both cases, the information is not lengthy nor difficult of explanation. A second method to cure the defect would be to adopt the forms as rules. However, this is generally more cumbersome and less flexible than the first. Regardless of which method is chosen, some way must be found to cure this defect.

Based upon the foregoing Findings of Fact, the Hearing Examiner makes the following:

CONCLUSIONS

1. That the Department gave proper notice of the hearing in this matter.

2. That the Department has fulfilled the procedural requirements of Minn. Stat. § 14.14, subds. 1 and 2 (1982) and all other procedural requirements of law or rule.

3. That the Department has demonstrated its statutory authority to adopt the proposed rules and has fulfilled all other substantive requirements of law or rule within the meaning of Minn. Stat. §§ 14.05, subd. 1, 14.15, subd. 3 and 14.50 (i) and (ii) (1982), except as noted at Finding 15.

4. That the Department has documented the need for and reasonableness of its proposed rules with an affirmative presentation of facts in the record within the meaning of Minn. Stat. § 14.14, subd. 2 (1982).

5. That the amendments and additions to the proposed rules which were suggested by the Department after publication of the proposed rules in the State Register do not result in rules which are substantially different from the proposed rules as published in the State Register within the meaning of Minn. Stat. § 14.15, subd. 3 (1982) and 9 MCAR §§ 2.110 A. and 2.111 (1980 Ed.).

6. That the Hearing Examiner has suggested action to correct the defects cited in Conclusion No. 4 as noted at Finding 15.

7. That due to Conclusion 6, this Report has been submitted to the Chief Hearing Examiner for his approval pursuant to Minn. Stat. § 14.15, subd. 3

(1982).

8. That any Findings which might properly be termed Conclusions and any Conclusions which might properly be termed Findings are hereby adopted as such.

9. That a finding or conclusion of need and reasonableness in regard to any particular rule subsection does not preclude and should not discourage the Department from further modification of the proposed rules based upon an examination of the public comments, so long as no substantial change is made from the proposed rules as originally published, and provided that the rule finally adopted is based upon facts appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Hearing Examiner makes the following:

RECOMMENDATION

It is hereby recommended that the proposed rules be adopted except where specifically otherwise noted above.

Dated this 13th day of January, 1983.

Allan W. Klein

ALLAN W. KLEIN
Hearing Examiner

APR 25 1983

STATE OF MINNESOTA

OFFICE OF ADMINISTRATIVE HEARINGS
400 SUMMIT BANK BUILDING
310 SOUTH FOURTH AVENUE
MINNEAPOLIS, MINNESOTA 55415
(612) 341-7600

April 20, 1983

Commissioner Jim Nichols
Department of Agriculture
90 West Plato Boulevard
St. Paul, Minnesota 55107

RE: In the Matter of the Adoption of Proposed Amendments to Rules Governing Fertilizer Labels and Labelling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendments Labels and labelling Requirements.
OAH Docket No. AGR-83-003-AK

Dear Commissioner Nichols:

Enclosed and served upon you by mail, please find the Order of No Substantial Change of the Chief Hearing Examiner in the above-entitled matter together with the official record and I am closing our file in this case.

Yours very truly,

Allan W. Klein

ALLAN W. KLEIN
Hearing Examiner

Telephone: 612/341-7609

AWK:eag
Encs.

AGR-83-003-AK

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA DEPARTMENT OF AGRICULTURE

In the Matter of the Adoption of Proposed Amendments to Rules Governing Fertilizer Labels and Labelling Requirements and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers and Soil and Plant Amendments Labels and Labelling Requirements

ORDER OF NO SUBSTANTIAL CHANGE

WHEREAS, a hearing was held on December 21, 1982 before Allan W. Klein, a Hearing Examiner of the State Office of Administrative Hearings, on the above-entitled matter in compliance with the rule-making provisions of Minn. Stat. Ch. 14 (1982); and

WHEREAS, the Report of Hearing Examiner made pursuant to Minn. Stat. § 14.50, was issued to the Department of Agriculture and;

WHEREAS, the Department of Agriculture has now determined to adopt rules; and

WHEREAS, the Department has submitted said rules to the Chief Hearing Examiner for review pursuant to Minn. Stat. §§ 14.16, 14.51, and 9 MCAR § 2.111; and

WHEREAS, the Chief Hearing Examiner finds that the final proposed rules are not substantially different from those proposed at the public hearing and that the Department has cured the defects in the rule as required.

NOW, THEREFORE, upon receipt of this Order, the Department of Agriculture has the responsibility of submitting the complete hearing record and the rules as adopted by the Department to the Attorney General and to publish in the State Register if approved by the Attorney General.

Dated this 20th day of April, 1983

Duane R. Harves

DUANE R. HARVES
Chief Hearing Examiner

STATE OF MINNESOTA

DEPARTMENT OF AGRICULTURE

IN THE MATTER OF THE PROPOSED AMENDMENTS TO RULES OF THE DEPARTMENT OF AGRICULTURE GOVERNING FERTILIZER LABELS AND LABELING REQUIREMENTS (Agr 319-323) AND THE PROPOSED ADOPTION OF RULES GOVERNING THE STORAGE AND HANDLING OF LIQUID AND DRY COMMERCIAL FERTILIZERS (3 MCAR §§ 1.0325-1.0326) AND SOIL AND PLANT AMENDMENT LABELS AND LABELING REQUIREMENTS (3 MCAR § 1.0328)

FINDINGS OF FACT AND CONCLUSIONS

The above-entitled matter came on for hearing before Hearing Examiner Alan W. Klein on the 21st day of December, 1982, at 9:00 A.M. in Conference Room A, Minnesota Department of Agriculture Building, 90 West Plato Boulevard, St. Paul, Minnesota, after proper notice required by Minnesota Statutes, section 14.14, subdivision 1 (1982), was served upon all persons, associations, and other interested groups registered with the Minnesota Department of Agriculture for that purpose.

After affording interested persons an opportunity to present written and oral data, statements and arguments, having heard all of the testimony, having considered all of the evidence adduced upon the records, files, and proceedings herein, I find and conclude the following:

FINDINGS

1. The Department concurs with the recommendations in the Report of the Hearing Examiner, and therefore adopts the report in full. The specific recommendations in that report at Finding 15 have been followed, and the Rules as Adopted incorporate those recommendations.

2. The Rule as Adopted to govern fertilizer labels and labeling requirements (3 MCAR § 1.0327) is changed from the Rule as Proposed. The amendments were introduced by the Department at the public hearing and they were not considered to be substantial, as noted by the hearing examiner in the Report of the Hearing Examiner at Finding 14 and at Conclusion 5. There are no changes other than these in the Rule as Adopted.

3. The Rules as Adopted to govern the storage and handling of liquid and dry commercial fertilizers (3 MCAR §§ 1.0325-1.0326) are changed from the Rules as Proposed, in accordance with the recommendation of the hearing examiner in the Report of the Hearing Examiner at Finding 15.

In the case of both rules, the Department elected to cure the defects noted in the Report by using the "laundry list" method suggested to cure them. The items stated on the sample applications appended to each Statement of Need and Reasonableness as Attachment A were incorporated into each of the rules governing liquid and dry commercial fertilizers. The items required on an application for a liquid commercial fertilizer facility appear in 3 MCAR § 1.0325 C.2., ✓ok p.2 and the items required on an application for a dry commercial fertilizer facility appear in 3 MCAR § 1.0326 C.2.

✓ok p.2

It should be noted that the last requirement in each list, that the applicant submit "any other information required by the commissioner reasonably related to the construction, installation, or modification of a liquid (or dry) commercial fertilizer facility in order to prevent hazards to people's lives, adjoining property, and the environment," was not on the sample forms. In the Department's view, this requirement is essential to the application process and it is in keeping with other provisions of the Rules as Proposed found acceptable by the hearing examiner.

It is an essential requirement because the Department has found through administrative experience that information in addition to that which is ordinarily required may be necessary to make an informed judgement about a proposed facility and its impact upon the public health or the environment. Due to the fact that the technology in the fertilizer industry is dynamic and rapidly changing, and to the fact that new fertilizer-related hazards to public health or to the environment may be discovered, the Department will at times need to obtain additional information from applicants relative to these new technological developments or potential hazards to fulfil its responsibilities under Minnesota Statutes, section 17.711-17.729.

This additional information required by the commissioner is limited in three ways. The first is that the information must be "reasonably" related to the proposed facility or its modification. The second and third limitations are criteria reflected elsewhere in the rules: the information must relate to the construction, alteration or modification of a facility and it must relate to potential hazards to people's lives, property or the environment. These criteria are consistent with rules 3 MCAR § 1.0325 parts B.4., C.3.-4., E. and I., and 3 MCAR § 1.0326 parts B.4., C.3.-4., D., E.1., and H.

At the same time that the Department feels it is essential to include this additional requirement, the Department also feels that it does not represent a substantial change from the Rules as Proposed, nor is it inconsistent with the recommendation of the hearing examiner which advised the Department to inform applicants of the information which will be required of them. It is the Department's interpretation that by calling upon it to specify what information would be required, the hearing examiner did not intend to preclude the Department from obtaining such additional information which might be necessary in unusual instances to make an informed judgment about whether a proposed facility or a facility's modification would pose any threat to the public health or to the environment.

4. Since it is part of the same record, it should be noted here that the Department finds no reason to change the rules governing soil and plant amendments labels and labeling requirements as proposed.

CONCLUSIONS

1. The Department concludes that the Rules as Adopted are now acceptable to the Office of Administrative Hearings and to the public for the following reasons:

   a. because the Department modified the rules based on comments received from the public, as noted in the Report of the Hearing Examiner at Finding 7;

   b. due to the affirmative testimony from the public at the public hearing held December 21, 1982;

   c. due to the responses of the hearing examiner to additional written comments of the public stated in his Findings 8.-12.; and

   d. due to the modifications in the Rules as Adopted made pursuant to the hearing examiner's recommendations.

2. The Department concludes that the changes between the Rules as Proposed and the Rules as Adopted are non-substantial for the reasons noted in the Commissioner's Findings 2. and 3.

3. The Department concludes from this record that the proposed rules, along with the changes proposed herein, are necessary and reasonable and that they are in the long-term best interests of the State of Minnesota. Therefore, I order the adoption of these rules, as evidenced by the Order Adopting Rules submitted with this record.

STATE OF MINNESOTA

DATE: April 18, 1983

Jim Nichols

COMMISIONER OF AGRICULTURE

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

IN THE MATTER OF THE PROPOSED RULES OF THE DEPARTMENT OF AGRICULTURE GOVERNING THE STORAGE AND HANDLING OF DRY COMMERCIAL FERTILIZER (3 MCAR S 1.0326)	))))	STATEMENT OF NEED AND REASONABLENESS

I. INTRODUCTION

The subject of this rulemaking is the proposed adoption by the Minnesota Department of Agriculture of a new rule governing the storage and handling of dry commercial fertilizer. This rule is proposed for adoption pursuant to Minnesota Statutes section 17.725, subd. 1, which authorizes the Department to establish rules for the storage and handling of commercial fertilizers in Minnesota.

Rulemaking on the proposed rule was authorized by the Department on October 28, 1982. The Commissioner of the Minnesota Department of Agriculture determined that the proposed adoption of this rule would be noncontroversial in nature due to consultations with representatives of the fertilizer industry and governmental pollution control officials. Further, the Department received no responses to its notice to solicit outside opinion in this matter. However, due to the provisions of Minn. Stat. section 17.725, subd. 1, a public hearing will be held regarding the adoption of this rule.

The discussion provided in this statement is divided into the following parts:

Part II. General overview

Part III. Need for and reasonableness of the proposed rule

Part IV. Attachments

II. GENERAL OVERVIEW

A. The Need for Regulating the Storage and Handling of Dry Commercial Fertilizer:

In order to understand the need for and reasonableness of this proposed rule, it will be useful to understand the current situation regarding dry commercial fertilizers in Minnesota. Prior to 1982, the Department's jurisdiction extended primarily to fertilizer products themselves rather than to the condition of facilities in which they were produced. Facilities storing and handling dry commercial fertilizers were not under the inspection or permitting authority of any agency of the state for the purposes related to Minnesota Statutes sections 17.711 to 17.729. In 1982, amendments to Minnesota Statutes sections 17.711 to 17.729 were passed which gave the Department of Agriculture new regulatory and inspection authority over these facilities. This move by the Legislature was prompted in part by the fact that within the preceding two years there have been approximately 20 releases of commercial fertilizers from facilities, about five of which have been releases of dry commercial fertilizers. Laboratory tests subsequent to these releases, caused primarily by human error and equipment failure, have shown that surface and ground water in some cases had been adversely affected. Because of this and because of the Department's existing authority in the area of agricultural chemicals, the Legislature accorded to the Department the new responsibility to approve fertilizer storage and handling facilities in addition to its prior responsibility for assuring fertilizer product quality.

The proposed rule is necessary for the Department to carry out its statutory responsibility to approve dry commercial fertilizer storage and handling facilities. Based on administrative experience with releases of dry commercial fertilizers as well as knowledge of fertilizer materials, the Department has become increasingly aware of the types of maintenance, safeguards, and operations that will reduce the number of incidents and minimize their impact on human life, property, and the environment when they do occur. The rule is also necessary to respond to public concern about such releases of dry commercial fertilizers. It has been the Department's administrative experience that through field inspections and education of plant operators, the number of incidents will likely be decreased. The provisions in the rule are reasonable because they have been informally discussed with and agreed to by representatives of the fertilizer industry, other governmental agencies and fertilizer experts at the University of Minnesota.

Under the authority granted by Minnesota Statutes section 17.719, Subd. 4, the Department has begun to inspect dry commercial fertilizer facilities and equipment to ensure that the provisions of Minnesota Statutes sections 17.711 to 17.729 are met. By the promulgation of this rule, the Department wishes to clarify for persons operating facilities its procedures for administering the 1982 additions to the law and to ultimately reduce the potential for incidents which will cause hazards to people's lives, adjoining property or the environment.

B. Format of the Proposed Rules:

The proposed rule is set forth in the following manner: Authority and purpose; definitions; approval of facility and equipment; variances; maintenance and operations; markings; outside storage; incidents; and enforcement.

In this statement, for the sake of brevity, the content of the rule has not been repeated, but the numbers of the parts of the rule have been noted for reference.

III. NEED FOR AND REASONABLENESS OF THE PROPOSED RULE

The need for and reasonableness of each part of the proposed rule follows.

3 MCAR S 1.0326 A. Authority and Purpose

This section is necessary and reasonable to clarify for readers and users the purpose of this rule governing the storage and handling of dry commercial fertilizers used for agricultural purposes and the authority by which the commissioner proposes the adoption of the rule.

3 MCAR S 1.0326 B. Definitions

This part of the rule sets forth the definitions of terms used in the rule which are necessary to clarify meanings for readers and users of the rule. They are reasonable terms because they are terms familiar in the fertilizer industry. Some of the definitions were incorporated from Minnesota Statutes section 17.713, while the following definitions were included and developed specifically for this rule.

The definition of "department" is necessary to identify the lead state agency in the event of an incident. The definition of "dry commercial fertilizer" is necessary because it clarifies the product subject to the provisions of this rule. The definition of "facility" is necessary because it clarifies the parameters of the storage and handling site subject to approval and inspection by the commissioner. The definition of "incident" is necessary because it clarifies the scope of occurrences that might cause the release of dry commercial fertilizers. The definition of "incident notification sign" is necessary to clarify that these signs are issued by the Department to assure uniformity of notification when an incident occurs.

The definition of "responsible party" is necessary to identify the person who is responsible either to clean up the incident himself or to authorize others to do so. The definition of "safeguards" is necessary to clarify the criterion that containment systems must meet. The definition of "storage container" is necessary to distinguish among three storage methods: bins and tanks, delivery equipment used for storage, and outside storage piles. The definition of "substantially altering" is necessary because it identifies the type of facility modifications that require the Department's approval.

3 MCAR S 1.0326 C. Approval of Facility and Equipment

This part of the rule contains two sections, the first pertains to the approval of new plants and the second pertains to the inspection of both newly approved and existing plants. The first section is authorized by Minnesota Statutes section 17.7155 and is necessary to assure that facilities built to handle and store dry commercial fertilizers are adequate. The type of information the Department will require of applicants is contained in Attachment A. This information will be verified by a Department inspector before approval is granted. While certain information will always be required by the Department, it is impossible to specify by rule all the information that may be required in particular cases because the technology in the industry is changing so rapidly that different information could well be required for each individual facility.

The second section of this part of the rule is necessary to inform persons operating facilities that the commissioner will act when inspection reveals that safeguards are insufficient to protect against hazards. The course the commissioner will follow is contained in Minnesota Statutes section 17.728, which is referenced in the rule.

Both sections of this part of the rule are reasonable because they are of benefit to industry, the public, and the environment. When dry commercial fertilizer facilities are properly constructed, maintained, and operated, persons operating them suffer less financial loss from product loss, the health of the public is better protected, and adverse effect on the environment is minimized where not eliminated altogether.

3 MCAR S 1.0326 D. Variances

This part of the rule is necessary to inform persons applying for approval of a new or substantially altered facility that a variance from certain parts of the rule may be requested provided that the variance meets both of the following criteria: adherence to the rule would cause economic hardship and the requested use does not constitute a hazard to people's lives, adjoining property or the environment. Minnesota Statutes section 15.0412, subd. 1a. permits a department to issue variances to rules provided that such criteria are provided in the rule.

Variances are reasonable, particularly variances from requiring safeguards, since safeguards are not always essential to protecting human life, property or the environment in the case of dry commercial

fertilizer because such fertilizer, which is composed of particulate matter, does not move from the facility of its own accord. Thus, requiring the installation of safeguards might prove an unreasonable economic hardship for persons operating facilities. It is further reasonable that the department provide the person requesting a variance a response within a prescribed time frame.

3 MCAR S 1.0326 E. Maintenance and Operations

This part of the rule contains three sections. The first section, regarding the maintenance and operation of the facility and its safeguards and equipment, is necessary to provide a standard for persons operating the facility. The standard regarding "avoidable amounts of particulate matter" may seem vague, but it is necessarily so. There are no federal standards in this area, nor are there any state standards either in Minnesota or elsewhere. It is in the industry's interest to attempt to prevent any product from escaping, but it is not reasonable to impose a standard where it is not possible for one to actually exist. This first section also contains an exemption from this section in cases where the existing facility does not pose any hazard to people's lives, adjoining property or the environment. This is a reasonable exemption because it will not cause unfair economic hardships for facilities operating in places where the escape of particulate matter has no significant adverse effect.

The second section of this part of the rule, regarding the requirement that storage containers be maintained to prevent fertilizer cross contamination, is necessary to ensure that purchasers of the fertilizer are in fact receiving what the label and labeling say the product is. It is also necessary to prevent undesirable chemical reactions among the fertilizers themselves while they are stored. The provision is reasonable because it is fair that purchasers should receive the product they pay for and because inappropriate chemical mixes mean a loss to the industry as well as to consumers.

The third section of this part of the rule regarding the requirements that storage container areas must be kept free of clutter including grass and weeds is necessary to prevent, where possible, a fire-related incident. This is a reasonable requirement from three points of view: industry will lose less product, the public's safety will be better assured, and less damage to the environment will result.

3 MCAR S 1.0326 F. Markings

This part of the rule contains two sections. The first section regarding the label on each storage container is necessary because it is a requirement of Minnesota Statutes section 17.716, subd. 5, and it aids employees of the facilities in avoiding incorrect formulations of fertilizers. These markings are particularly important so that individuals responding in an emergency who may not be familiar with the dry commercial fertilizers will be able to accurately identify the product when notifying emergency personnel of an incident.

The second section of this part of the rule regarding the incident notification sign is necessary to identify for employees of the facility emergency personnel to contact in the event of an incident. It is reasonable to provide for a uniform method of response to incidents so that potential hazards to people's lives, adjoining property or the environment are reduced.

3 MCAR S 1.0326 G. Outside Storage

This part of the rule regarding the outside storage of dry commercial fertilizer is necessary because it provides the fertilizer industry with an important storage option. The principal dry fertilizer stored in this manner is the mineral potash, one of the three primary nutrients used for agricultural crops. The peak demand periods for this nutrient occur in the spring and fall, and each lasts a little under a month. Further, the use of this nutrient in some parts of the state is great because it is a common practice for some farmers to apply straight potash to their fields using 4, 6, or 8 ton spreaders and thus they may require up to those amounts in one load and may use more than one load in both the spring and fall. Because of this high volume and rapid turnover, it is not reasonable to require the industry to build additional storage containers for this use. Outside storage is also reasonable because the physical properties of potash are such that upon contact with water, the nutrient will create a crust which will shed water and thus reduce the potential for runoff into surface and ground waters.

3 MCAR S 1.0326 H. Incidents

This part of the rule is necessary to inform persons owning or operating a dry commercial fertilizer facility in Minnesota of their statutory responsibility under Minnesota Statutes section 17.7285 if an incident should occur and clarifies the role of the Department and other state agencies in responding to incidents.

It is reasonable to have such procedures in order to expedite the containment and clean up of the result of the incident and ultimately minimize the cost of clean up and hazards to people's lives, adjoining property, or the environment.

It is also necessary and reasonable that the Department clarify the extent of its liability with respect to incident clean up or containment for the information of all parties involved in an incident.

3 MCAR S 1.0326 I. Enforcement

This section of the rule is necessary to inform persons operating facilities subject to this rule of the commissioner's intent to act and procedures for the commissioner's action in instances where provisions of this rule are not met. Further, it is necessary to inform persons operating dry commercial fertilizer facilities of their rights should they fail to meet the requirements of the rule.

This section is reasonable since the persons are entitled to know the consequences of failing to meet the provisions of the rule and are also entitled to know that the commissioner will proceed in the same fair manner, affording opportunities for hearings before canceling approvals, when provisions of this rule are not met.

IV. ATTACHMENTS

The following attachments are related to the material in this statement and are appended.

Attachment A - Questions to be Asked on the Application for Approval of a Dry Commercial Fertilizer Facility

Attachment B - Sample "Incident Notification Sign" for Dry Commercial Fertilizer Facilities

Attachment C - Memorandum of Understanding Regarding Procedures for Handling Pesticide and Plant Food Emergencies

Attachment D - Excerpt from "Bulk Blend Quality Control Manual" prepared by The Fertilizer Institute, Washington, D.C., June 1975.

QUESTIONS TO BE ASKED ON THE APPLICATION FOR APPROVAL OF A DRY COMMERCIAL FERTILIZER FACILITY

1) Firm making application: Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

2) Firm who will operate facility: Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

3) Firm who will construct/install/modify site:

Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

4) ☐ New ☐ Existing ☐ Substantially Altering

5) Location of site: County _____ City _____ Township _____

(Legal Description _____

_____?)

6) Does this construction/installation/modification require a local permit?

☐ Yes ☐ No If yes, submit a copy.

7) Size of lot owned or leased: _____

8) Number and capacity of storage containers:

New _____; Existing _____;

Substantially Altering _____

9) Type of storage containers *(wood, concrete, etc.)*: _____

_____

10) Describe safeguards, if any: _____

_____

11) Submit three (3) scale drawings of the facility, including other storage containers and buildings.

12) Is there an existing contingency plan with the local fire and law enforcement personnel? *(check one)*

☐ Yes, briefly describe and indicate how often it is tested and reviewed:

_____

_____

_____

☐ No (If a contingency plan does not exist, one should be established within 90 days of the completed construction.)

Rev. 1/82

MEMORANDUM OF UNDERSTANDING

REGARDING PROCEDURES FOR HANDLING PESTICIDE AND PLANT FOOD EMERGENCIES

It is recognized that pesticides, including but not limited to, insecticides, herbicides, rodenticides, fungicides, and plant food materials (fertilizers), including anhydrous ammonia, may be hazardous to the safety of the public and the environment when involved in an emergency situation. It is further recognized that appropriate, efficient procedures and plans must be implemented as rapidly as possible with the occurrence of an emergency involving these materials. It is recognized that a clear understanding of respective agency responsibilities will hasten implementation of such procedures and plans.

The purpose of this Memorandum of Understanding is to establish and clarify procedures to be followed by state agencies upon the occurrence, or threat of occurrence, of accidents, spills, fires, floods, poisonings, exposures, leaks, or other similar emergencies involving pesticides and plant food materials (fertilizers).

1) There is hereby established an "Agricultural Chemical Emergency Response Team". This team shall be composed of representatives of each of the following agencies:

   Minnesota Department of Agriculture

   Minnesota Pollution Control Agency

   Minnesota Department of Natural Resources

   Minnesota Department of Health

   Minnesota Division of Emergency Services (Department of Public Safety)

   Minnesota Department of Transportation

2) The Minnesota Department of Agriculture is hereby designated as the lead coordinating agency for the Agricultural Chemical Emergency Response Team. The department shall be responsible for the coordination of plans and procedures to deal with pesticide and fertilizer emergencies.

3) Government regulatory agencies and affected industry will be notified of the contents of the Memorandum by the lead coordinating agency.

4) The lead coordinating agency shall immediately contact all team members upon notification of an emergency.

5) Any Emergency Response Team member shall immediately notify the lead coordinating agency as to the occurrence of an emergency.

6) The lead coordinating agency may call upon other appropriate local, state, and federal agencies for assistance in the handling of such emergencies.

7) The Minnesota Department of Agriculture shall be a designated agent of the Minnesota Pollution Control Agency, pursuant to Minnesota Statute 115.061, regarding this type of emergency. This will facilitate a coordinated response to the emergency.

8) The Emergency Response Team shall develop guidelines and procedures for the implementation of practical and efficient measures to handle emergencies when they occur.

9) Responsibilities and procedures outlined herein shall be effective immediately upon the signing of this Memorandum of Understanding by all agencies, and shall remain in effect until January 1, 1983. At least thirty (30) days prior to January 1, 1983, the representatives to the Agricultural Chemical Emergency Response Team shall meet to discuss continuation, modification, or termination of this Memorandum of Understanding.

10) In the event of a "large scale" emergency, such as a fire involving large quantities of pesticides, a predetermined organizational structure shall go into effect in order to respond to the situation in the most efficient manner.

11) As soon as possible, after each "large scale" emergency, the lead coordinating agency shall conduct a debriefing session.

FOR MINNESOTA DEPARTMENT OF AGRICULTURE:

Mark W. Seltz
Commissioner

1/4/82
Dated

FOR MINNESOTA DEPARTMENT OF NATURAL RESOURCES:

Joseph N. Alexander
Commissioner

6 Jan 82
Dated

FOR MINNESOTA DIVISION OF EMERGENCY SERVICES:

Kenneth A Pauch
Director

1/6/82
Dated

FOR MINNESOTA POLLUTION CONTROL AGENCY:

Louis Breimhurst
Executive Director

1/6/82
Dated

FOR MINNESOTA DEPARTMENT OF HEALTH:

George R Petterson
Commissioner

Jan 15, 1982
Dated

FOR MINNESOTA DEPARTMENT OF TRANSPORTATION:

M Braun
Commissioner

1/13/82
Dated

ORGANIZATIONAL STRUCTURE

FOR HANDLING "LARGE SCALE" EMERGENCIES INVOLVING PESTICIDES AND FERTILIZERS

It is recognized that preplanning and assignment of various responsibilities is very desirable when dealing with a "large scale" incident involving many people and agencies. The following officers are named and understand their duties described below prior to the incident. Along with a lead officer, a secondary officer shall also be named. In most or all cases, the secondary officer should be from a different agency (to encourage interaction and cooperation). There is an alternate individual named for each lead and secondary officer.

ADMINISTRATIVE AND PUBLIC INFORMATION OFFICER Named from MDA (a high level administrator). Secondary officer from MPCA. Will be charged with the overall handling of the incident on the state level. Responsible for the following:

1) Shall make initial contacts with involved individuals to set guidelines for the clean up.

2) Shall maintain contacts with local officials, state officials, federal officials, and the Governor's Office, giving up-to-date progress reports as needed.

3) Shall deal with the affected parties on major items of concern resulting from the emergency (time schedule, financial responsibility, etc.).

4) Shall be the only state official designated to provide information to the news media. Media contacts to other officers or state agencies represented within this Memorandum shall be referred to this individual. This individual shall receive information from the FIELD OFFICER IN CHARGE and other field staff.

5) Shall make the final decision regarding disposal or other areas where there may not be complete agreement among state agencies. This would involve consultation with administrators of the other involved state agencies.

6) Shall coordinate with the Division of Emergency Services (Public Safety) in developing requests for financial assistance from the Executive Council.

FIELD OFFICER IN CHARGE Named from MPCA. Secondary officer from MDA. Will spend most of the time immediately following the incident on the site or at the state agency command post. Responsible for the following:

1) Shall direct operations at the site so that decisions and directions made by members of the organizational structure are carried out.

2) Shall report to and regularly update the administrative officer.

3) Shall coordinate activities of the officers named herein.

4) Shall communicate with pollution control personnel, on both the local and federal level, when involved at the site.

5) During the Incident. The fire department and the responsible party are responsible for containment and minimizing environmental contamination at the scene of an incident. If the fire department is not trained in this area, the FIELD OFFICER IN CHARGE, if present, shall direct containment and/or other measures in cooperation with the fire department. In the case of a fire, this may involve plugging drains or sewers, diking, and reducing the amount of water used. Thus, the FIELD OFFICER IN CHARGE should have contacts for heavy equipment, pumps, tanker trucks, etc.

6) Following the Incident. After the fire department has left, it is up to the responsible party to maintain containment and minimize pollution. The responsible party shall also take the necessary steps to insure proper clean-up and disposal of the materials involved (includes, but not limited to, concentrated pesticides, contaminated soil, building debris, and runoff water).

7) Shall determine which products can be salvaged for subsequent sale or use. May be necessary to place stop sale on damaged or contaminated products such as feeds, fertilizers, pesticides, or seeds.

8) Shall maintain a single log of all samples collected and laboratory reports. All samples taken for laboratory analysis during and after the emergency will be channeled through the FIELD OFFICER IN CHARGE on duty.

9) Shall check with the Minnesota Department of Transportation, Hazardous Waste Section, concerning transportation of debris.

SAFETY OFFICER Named from MDH.

1) During the Incident. MDH SAFETY OFFICER will be at the scene of the incident and shall advise the fire department and/or FIELD OFFICER IN CHARGE in the following areas:

   A) The protection of firefighters and other emergency and/or containment personnel from exposure through use of proper equipment.

   B) The determination of need for evacuation of the surrounding area.

   C) The monitoring of the exposure and decontamination of emergency and/or containment personnel.

   D) The monitoring of area security.

   E) The notification of local hospitals to prepare them for possible affected individuals.

   The fire department may not be trained in the above areas. If present during the incident, the SAFETY OFFICER shall direct the above in cooperation with the fire department.

2) Following the Incident. After the fire department has left, it is up to the responsible party to maintain the security of the area. The SAFETY OFFICER shall work with the FIELD OFFICER IN CHARGE to see that this is done. During containment and clean-up operations the SAFETY OFFICER shall monitor the use of proper safety equipment. The SAFETY OFFICER shall also monitor the exposure and decontamination of all persons involved.

ENVIRONMENTAL OFFICER Named from the DNR. Secondary officer from MPCA. The ENVIRONMENTAL OFFICER shall assist and advise the FIELD OFFICER IN CHARGE regarding environmental concerns. Responsible for the following:

1) During the Incident.

   A) The assessment of drainage and/or runoff patterns from the site to public water.

   B) The collection of samples to determine if materials from the site have entered public waters.

2) Following the Incident.

   A) The assessment of environmental damage.

      a) Kills or contamination of fish and wildlife.

      b) Damage to fish and wildlife habitat.

   B) Assist in sampling to determine the kinds and amounts of materials that may have left the site.

   C) Advise as to likely effects of proposed disposal practices on fish and wildlife or their habitat.

RESOURCE OFFICER Named from Division of Emergency Services, DPS. Secondary officer from DOT, Office of Rates and Regulations. Responsible for the following:

1) Upon notification by the lead agency, or incident/accident responder, the Division of Emergency Services Duty Officer or designee will back-up lead agency and notify all other agencies or team responders on the call list.

2) Upon completion of the call list, DES will inform the lead agency as to the status of notification and the availability of the State Emergency Operation Center for use as the incident/accident command post if needed.

3) Shall log all data, information, requests, and notifications that have been directed to the Division of Emergency Services.

4) Shall assist the lead agency in preparation of financial requests under Minnesota Statutes Chapter 9, if assistance is appropriate.

5) Shall prepare status reports as needed.

6) Shall provide a complete log of DES activities/actions to the lead agency and initial team responder.

TRANSPORTATION OFFICER Named from DOT. Secondary officer from MDA. Will spend most of the time immediately following the incident on the site or at DOT headquarters. Responsible for the following:

1) Shall coordinate with the lead agency, the transportation of hazardous material or contaminated debris from the incident site to its final destination (hazardous waste disposal site, land application site, etc.).

LARGE SCALE EMERGENCIES OFFICERS FOR 1982 SHALL BE AS FOLLOWS:

LEAD OFFICER	SECONDARY OFFICER
ADMINISTRATIVE AND PUBLIC INFORMATION OFFICER:	
John Baumgartner Assistant Commissioner Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 296-9310 *Home Phone:* (612) 739-3648	Russ Felt, Acting Chief Enforcement Section Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7755 *Home Phone:* (612) 724-7254 *(24 Hr. Emergency Response:* (612) 296-7373*)*
ALTERNATE:	
William Bulger, Director Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 296-1161 *Home Phone:* (612) 645-2329	Dick Kable, Head Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West Plato Boulevard Roseville, Minnesota 55113 *Office Phone:* (612) 296-7235 *Home Phone:* (612) 434-6547 *(24 Hr. Emergency Response:* (612) 296-7373*)*
FIELD OFFICER IN CHARGE:	
Dick Kable, Head Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7235 *Home Phone:* (612) 434-6547 *(24 Hr. Emergency Response:* (612) 296-7373*)*	Dave Dally Pesticide Control Specialist Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 297-2528 *Home Phone:* (612) 459-6486
ALTERNATE:	
Bob Dullinger Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7367 *Home Phone:* (612) 699-9487 *(24 Hr. Emergency Response:* (612) 296-7373*)*	Larry Palmer Pesticide Control Specialist Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 297-2530 *Home Phone:* (612) 755-7624

LEAD OFFICER

SECONDARY OFFICER

SAFETY OFFICER:

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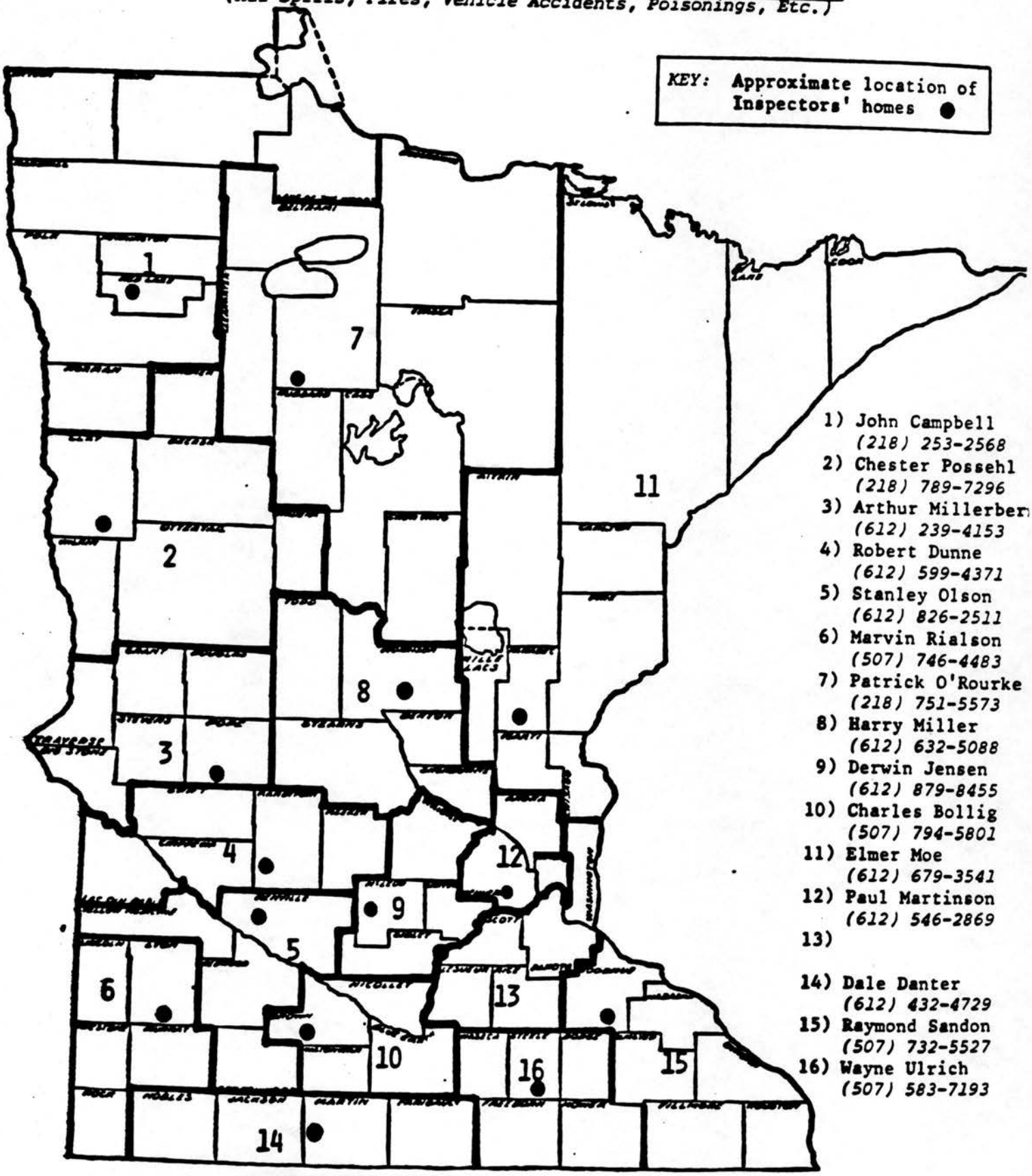

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* * * * *

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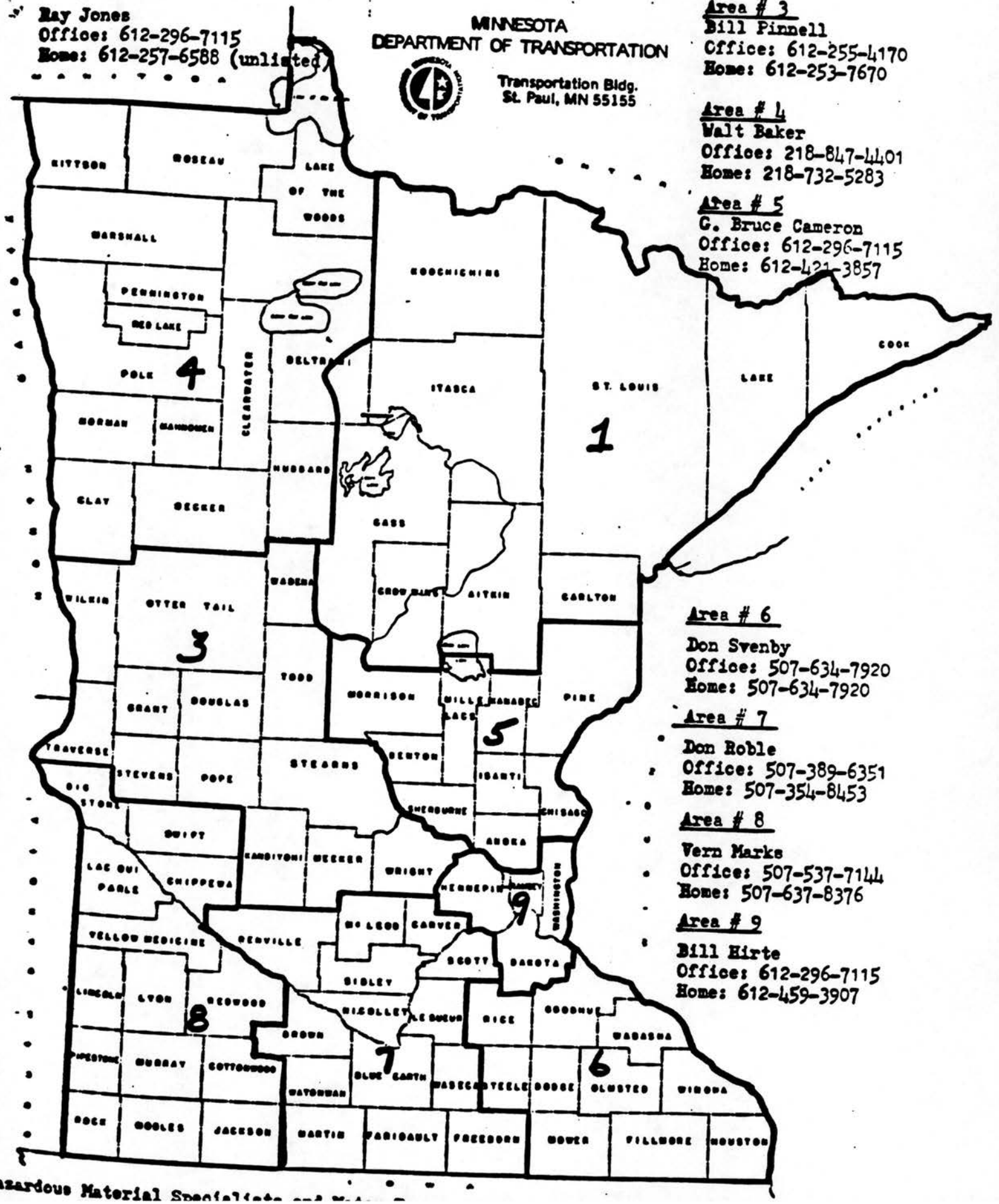

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Hazardous Material Specialists and

BULK BLEND QUALITY CONTROL MANUAL

Produced by

THE FERTILIZER INSTITUTE'S

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June, 1975

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This manual is a guide in quality control practices in fertilizer blending operations. The information described herein reflects the best informed judgment and experience of personnel involved in its preparation, but does not constitute a warranty and none should be implied. Neither The Fertilizer Institute, the members of its staff nor of its committees shall be liable for the use of any of the opinions or information contained in the manual.

SECTION D. PLANT DESIGN AND EQUIPMENT

A quality blended fertilizer is the goal of each fertilizer blender. To accomplish this goal, he needs a well-designed facility for ease of operation in the production of these quality products. Additionally, he needs to be aware of fertilizer industry trends, new building materials, new improved construction methods, cost of materials, etc.

1. Plant Design

The typical bulk blend plant consists of three major components:

(a) Horizontal or vertical storage plant
(b) Fertilizer receiving machinery system
(c) Fertilizer blending and loadout system.

Various designs have been used in all three with success in new plants or as additions to existing structures. In any event, an engineering study should be made on:

(a) building site considerations
(b) cost/unit volume of storage area
(c) material receiving system
(d) blending system, and
(e) loadout system.

A flow diagram of a typical blend plant is shown in Figure 14.

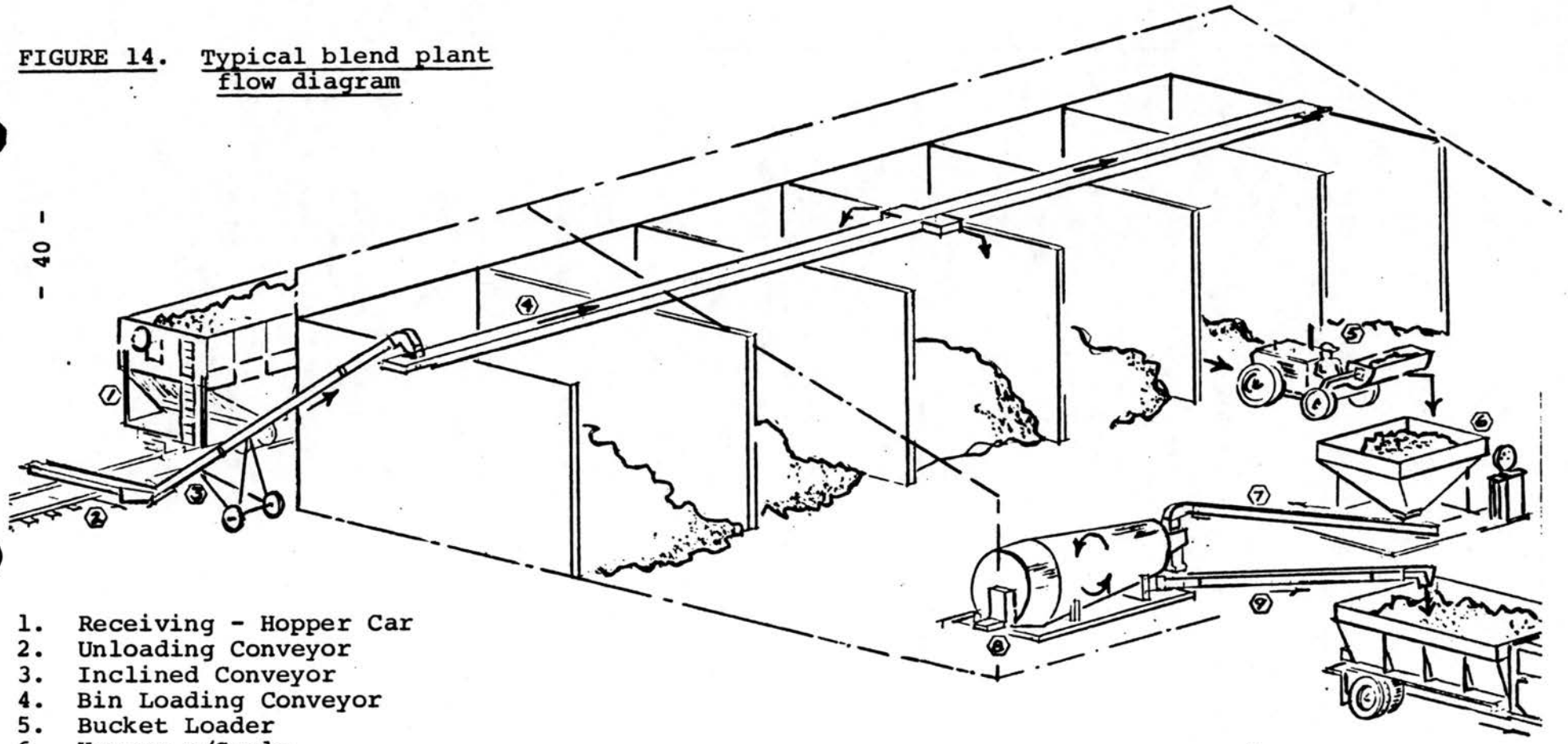
2. Materials of Construction

A well-designed facility makes use of the most recent industry developments, proven new building materials and construction techniques. Wood, concrete, steel and reinforced plastic have all been used with success. Among these, wood is still one of the most satisfactory and widely used materials. However, when storing ammonium nitrate in wooden bins, a protective coating is required. National Fire Protection Association Bulletin 490 gives details on such coatings.

a. Storage Bins

Upright wooden or metal silos used for this purpose should be equipped with good anti-segregation devices described later in the manual.

FIGURE 14. Typical blend plant flow diagram



1. Receiving - Hopper Car
2. Unloading Conveyor
3. Inclined Conveyor
4. Bin Loading Conveyor
5. Bucket Loader
6. Hopper w/Scale
7. Conveyor - To Mixer
8. Mixer
9. Loading-Out Conveyor

(Courtesy of Landmark, Inc.)

b. Bin Walls

The walls of horizontal bins must be made out of heavy timber and/or braced sufficiently to prevent either collapse or bulging when full.

c. Bin Gates

Wood reinforced with steel is the best construction material for bin gates. An example is shown in Figure 15. The top view shows the bin empty and the gate open. The middle picture shows the gate closed. The bottom photo shows a filled bin with the gate closed -- note material flows out well enough for pickup by a payloader.

d. Floors

Without exception, concrete is the best material for bin floors. Concrete should be at least five inches thick, reinforced with steel wire mesh, preferably unerlaid with a four-inch sand fill and a poly-vapor barrier.

Some coatings for concrete are effective in minimizing the corrosive attack by materials such as ammonium nitrate and potash. Such curing agents and coatings are listed below:

(1) Magnesium fluosilicate or zinc fluosilicate

(2) Sodium silicate (commonly called water glass)

(3) Drying oils (linseed oil, tung oil, soybean oil)

(4) Cumar (synthetic resin)

(5) Varnishes and paints

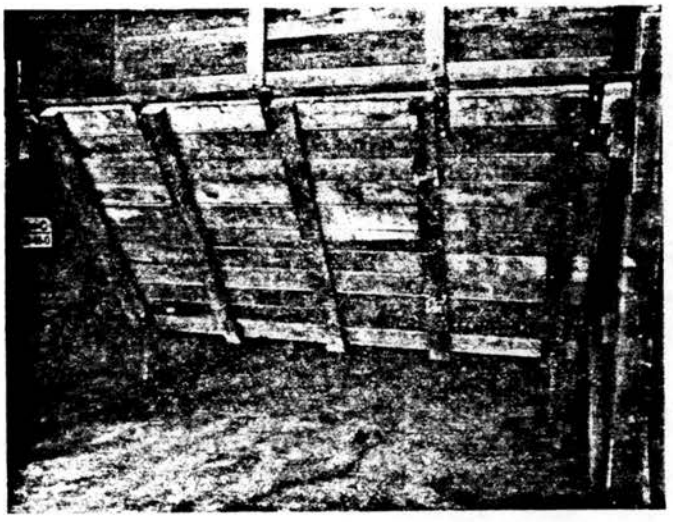
(6) Bituminous and/or coal tar paints

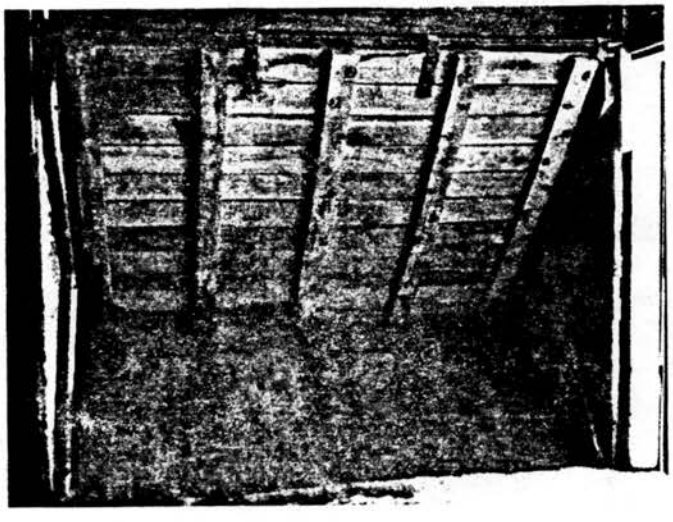
See Appendix 4 for application methods.

3. Plant Equipment

A well-designed plant utilizes the most recent industry developments. To a large degree, plant design will affect the selection of plant equipment. Thus, design and performance should be requested and supplied by the manufacturer before purchase.







(Courtesy of TVA)

FIGURE 15.

Wooden bin gates reinforced with steel

a. Receiving Equipment, Augers or Belts

Conveyor belts are preferred for unloading or transferring granular fertilizers. They do not grind or degrade the granules to fines, as augers may, which can result in segregation and plant dust problems.

Short augers which are kept clean are acceptable. Coating the inside of augers with neoprene or Kynar will help prevent caking on the housing and on the flights.

b. Hopper Design

There are several hopper designs that are satisfactory when equipped with anti-segregation devices to minimize or prevent coning. Examples are shown in Figures 16 and 17. This qualification applies to bagging, bulk loading and holding hoppers.

c. Scales (and volumetric delivery devices)

Bagging scales or scale weighing hoppers must pass state inspection for accuracy. It is desirable for each blender to have standard weights, certified by state inspectors, to check all scale equipment daily.

If the scale weighing hopper is delivering insufficient or excessive amounts of material, adjust the charge to the blender accordingly. The scale weighing hopper can be checked by weighing 500-pound increments of material on a standardized platform scale (to the full capacity of the scale weighing hopper) and then transferring this to the weighing hopper for recalibration.

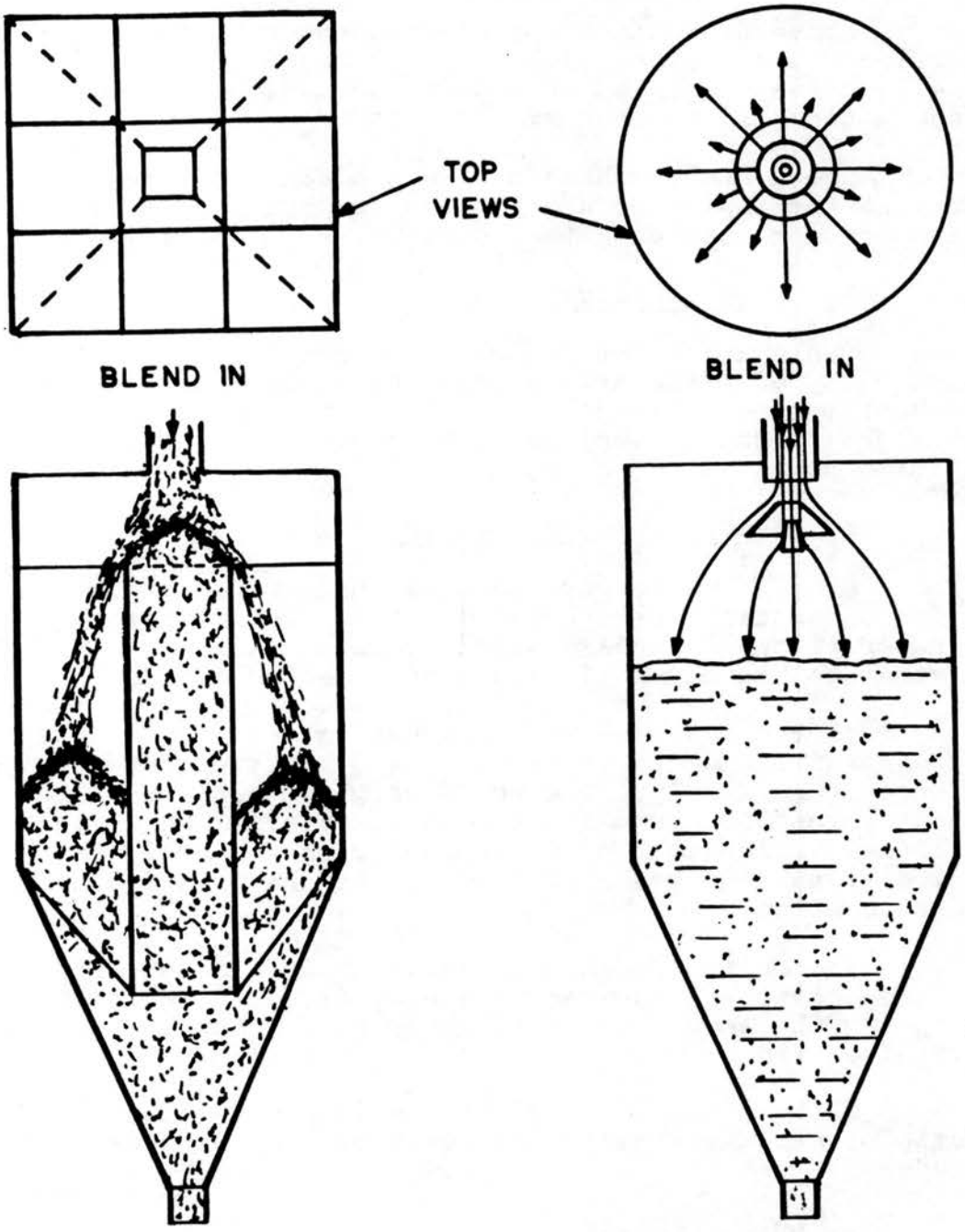
Volumetric feeder mechanisms must also be kept in good working order -- they can be standardized by catching and weighing the amount of given material discharged in a given amount of time.

Chemical analysis of blends is another check on the ratio of materials being delivered by scale hoppers or volumetric feeders.

d. Mixing Equipment

There are many excellent mixers. They include ribbon mixers, rotary, and rotary flighted mixers which look like concrete mixers but which are designed for blending fertilizers. Unmodified concrete mixers do not blend well and should not be used as "blenders." Upright baffle mixers have exhibited some problems. Powdered micronutrients or liquid pesticides cannot be added in baffle mixers[1],[5],[6].

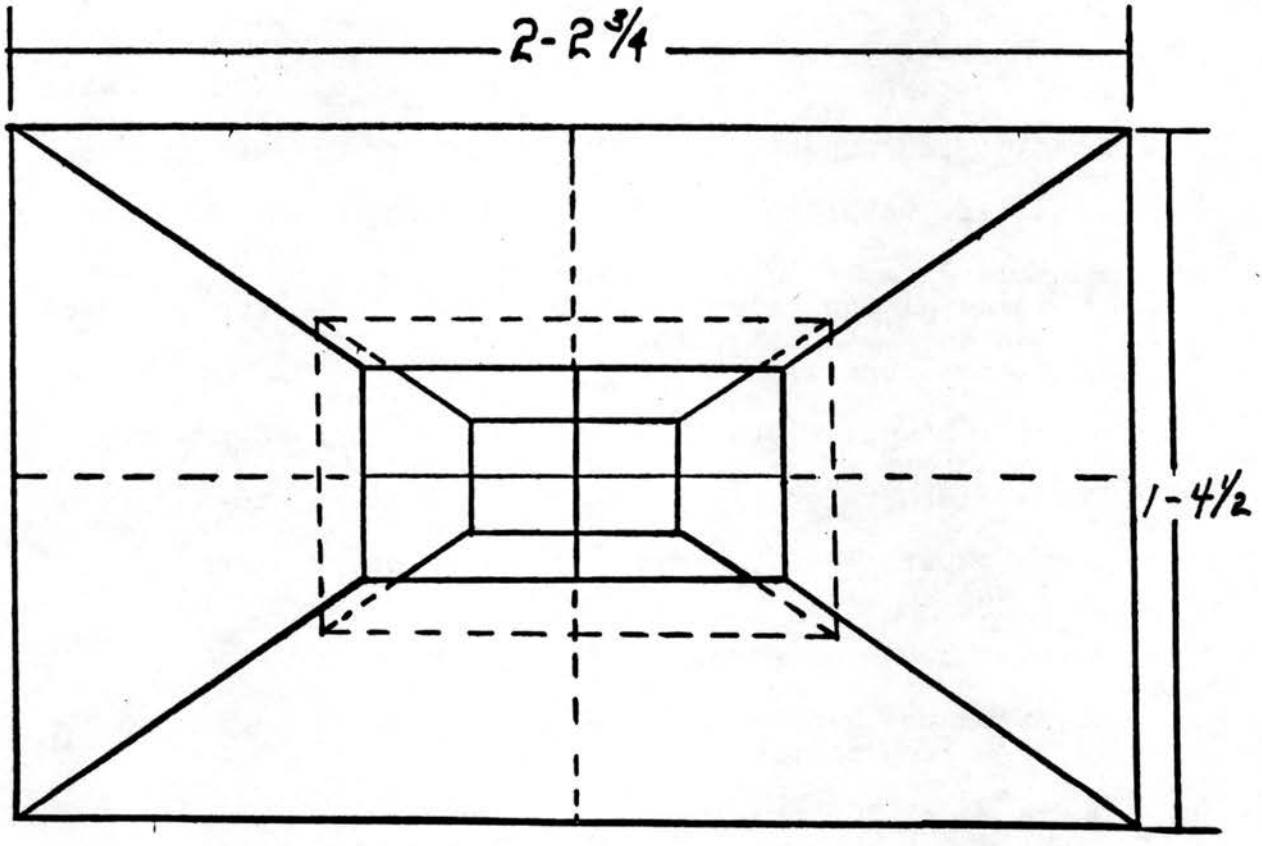
FIGURE 16. Methods suggested for reducing segregation[1]



(Courtesy of TVA)

FIGURE 17. Baffle for large packer holding bin

Designed to divide material taking into account the velocity at 4.5 tons per minute it handles.



e. Vertical Elevators

Most blend plants utilize vertical bucket elevators in their material receiving system or in the bulk load out system. The "conventional" all steel bucket and casing is susceptible to corrosion. In recent years wood and reinforced plastic legs are available from manufacturers and are being used very satisfactorily.

f. Testing Equipment

As a minimum, the following testing equipment items are required for quality control testing:

Testing Equipment	Where to Obtain
1. View box	Construct according to Figure 1.
2. Quart fruit jars, Ball Mason type	Grocery or hardware store
3. Plastic tablespoons	Grocery or variety store
4. Distilled water	Grocery or drugstore
5. Funnels with 16 mm ID opening (a metal equivalent funnel can be substituted for powder funnel)	Laboratory supply houses
6. Stiff 1-2" paint brush	Paint or hardware store
7. Twelve-inch ruler	Stationery store
8. Graph paper, 10x10 spaces/ inch	Stationery store
9. Plastic bags for samples	Grocery store
10. Eight ounce, wide-mouth, screw-top bottles	Laboratory supply houses
11. Ohaus model 710 triple beam balance	Laboratory supply houses
12. Drano (crystal) drain opener	Grocery store
13. Riffle	See TFI Method 112, p. 73
14. Sink	Plumbing or hardware store

15.	Sampling probes:	
	a. Missouri "D" tube	American Tool and Die 917 Maple Street Des Moines, IA 50267
	or	
	b. 524 grain probe	Burrows Equipment Company 1316 Sherman Avenue Evanston, IL 60204
	or	
	c. Slotted single tube probe, Burrows No. 599 or equivalent	Burrows Equipment Company 1316 Sherman Avenue Evanston, IL 60204
16.	Tyler screens 6, 8, 10, 14 and 20 mesh, 8" diameter, 2" height (stainless steel recommended with lid and bottom pan)	Tyler Company or Laboratory supply houses
17.	Alkacid pH paper	Laboratory supply houses
18.	100 ml PE Griffin low form beakers	Laboratory supply houses
19.	100 ml PE graduated cylinders	Laboratory supply houses
20.	Calculator - good, small electronic is very satisfactory	Department stores

SECTION E. OPERATIONS

One can have a well-designed plant plus excellent raw materials and still obtain unsatisfactory blends unless the operation procedures described in this section are followed:

1. Filling Bins

The horizontal bin should be filled with materials using the multi-point fill technique as illustrated in Figure 18. When filling vertical bins or silos, segregation of the various particle sizes can be minimized if anti-segregation devices described previously are used.

2. Payloader Approaches to Piles

When charging a blender, one normally withdraws materials from the same position of all piles being used; for example, the bottom of the ammonium nitrate, DAP and potash piles. If any material appears finer than expected, check by sampling and screening.

Extreme care is required when transferring material from a floor-level bin to the spreader truck, etc. Remove the product from the pile by "working the pile" with a payloader, for example, withdraw from left, center, right, left, center, right of the pile. The product can go into the bulk conveyance from the payloader or through either the belt conveyor or bucket elevator setups discussed earlier. In either case, "spread the load" by manual movement of the flexible spout.

3. Mixing

The first rule is to determine mixing time, but don't overmix! This mistake causes degradation (breakdown of particles) and, in effect, "unblending" of materials.

A mixing time of one minute per ton is generally satisfactory. However, a ribbon mixer requires about five minutes for a batch[6]. Generally, a rotary-barrel type mixer will produce a more uniform blend than other types of mixers.

To determine the proper mixing time, first determine the time required in seconds to discharge two tons of product from the mixer. Then charge the mixer with a blend containing two or more materials matched in particle size. (Use the same

FIGURE 18. Suggested methods for reducing segregation during filling of floor-level storage bins



(Courtesy of TVA)

total batch weight used for determining discharge time. Keep in mind the blender load should not occupy more than about 60 per cent of the total mixer volume.) Proceed to determine mixer performance in the manner described in Appendix 3.

4. Bagging

As described in the "Hopper Design" section and in Figure 16, bagging hoppers should have baffles to minimize coning, and hence segregation. The objective is to fill the bag with the correct products, properly mixed. The critical operations in achieving this are:

a. Labeling - This must conform with state and, as necessary, interstate regulations.

b. Weights - The net weight of material in the bag must be within state tolerances. Net weight is, of course, total minus tare (weight of empty bag). Determine tare weight by weighing 10 empty bags on a certified scale. This weight, divided by 10, is the tare weight per bag.

When using a volumetric bag filler, check-weigh on certified scales at least 10 per cent of the bags. Check-weighing usually can be reduced to five per cent of the bags when using gravimetric systems. Scales should be clean and standardized against standard weights at least once a day, preferably before startup in the morning.

The bags chosen for check-weighing should be selected at random. Adjust scales to deliver the correct weight of material.

c. Closure - The two usual methods of bag closure are sewing or tape over sewing (TOS). Sewing only is normally satisfactory if the bagged material is for immediate use. TOS is recommended if the blend contains ammonium nitrate, or a blend containing hygroscopic material.

d. Handling - Throwing or pitching the bags can rupture the closure or otherwise damage the bags. Rough handling of palletized material can result in punctured bags.

e. Bag-to-Bag Uniformity (Process Capability) - The composition of a given product in all bags must be uniform. At times it is necessary to determine bag-to-bag uniformity (in nutrient content). If the bagging hopper is poorly designed, or if the materials in the blend were not matched in size, bag-to-bag uniformity will be poor and can result in a farmer complaint, state deficiency, or both.

To determine the quality of blended material being discharged from the bagging hopper, proceed according to instructions in Appendix 3.

5. Bulk Loading Bins

Bulk blended-solid fertilizer is generally loaded into trucks, etc., from bagging bins or bins constructed in a similar manner. Anti-segregation devices like those installed in bagging hoppers will help prevent segregation while the blend is being discharged into spreader trucks and trailers or tote bins. In addition, minimize segregation by spreading the material as it goes into the bulk conveyance by use of a large grain shovel or allowing it to flow into the truck through a telescoping, flexible spout or large truck tire tube being manually moved about the truck (Burrows Equipment Company, 1316 Sherman Ave., Evanston, Illinois 60204, is one supplier of flexible car loading spouts. Sizes vary from 6" in diameter x 8' to 12" in diameter x 12').

If the blend is being transferred some distance to the bulk conveyance, avoid the use of long screw conveyors which break up granules and add to segregation. Use elevated belt conveyors or a bucket elevator - sliding spout setup which allows the fertilizer to fall into the conveyance through a movable flexible spout.

6. Filler Materials

Use dry granular materials (listed in Appendix 1) sized to match the fertilizer materials. Light weight materials such as vermiculite cannot be blended with granular fertilizers because they will segregate. Also, any finely sized material such as limestone or sand will segregate from granular fertilizer materials.

7. Additives

a. Secondary and Micronutrients

Refer to Section C, 4, for calculating formulas -- if a guaranteed grade must be maintained, remember to make "room" in the formula for the additive.

When the pounds of a secondary or micronutrient account for five per cent or more of the total weight charge to the blender, simply use a properly sized granular product and proceed in normal blending fashion.

If the additive accounts for less than five per cent of the total weight of materials charged to the blender, it is recommended that, in order to obtain homogeneity, a powdered material should be used along with one to three per cent binder. The binder causes the powder to adhere to the granules[1]. Stated another way, the powdered micronutrient is stuck onto the fertilizer granules with about one to three per cent liquid (which will not normally affect the flowability of the blend and, in addition, serves as a dedusting agent).

The liquids or binding agents include oils, high-analysis fertilizer solutions and sometimes, water. (Keep in mind that both Tennessee Valley Authority and American Cyanamid Company independently developed patented procedures[7] for coating powdered micronutrient materials on fertilizers with binding agents.)

Figure 19[8] illustrates equipment which is used for coating granules with micronutrients. If the binder is an oil, the system illustrated in Figure 19 can also be used for pesticides.

The procedure for sticking powdered materials onto granular fertilizers normally is as follows:

(1) Charge all of the granular fertilizer materials to the mixer and mix one minute.

(2) Add the calculated amount of powdered material (which must be compatible with the granules) to the mixer. Mix one minute before spraying with the liquid.

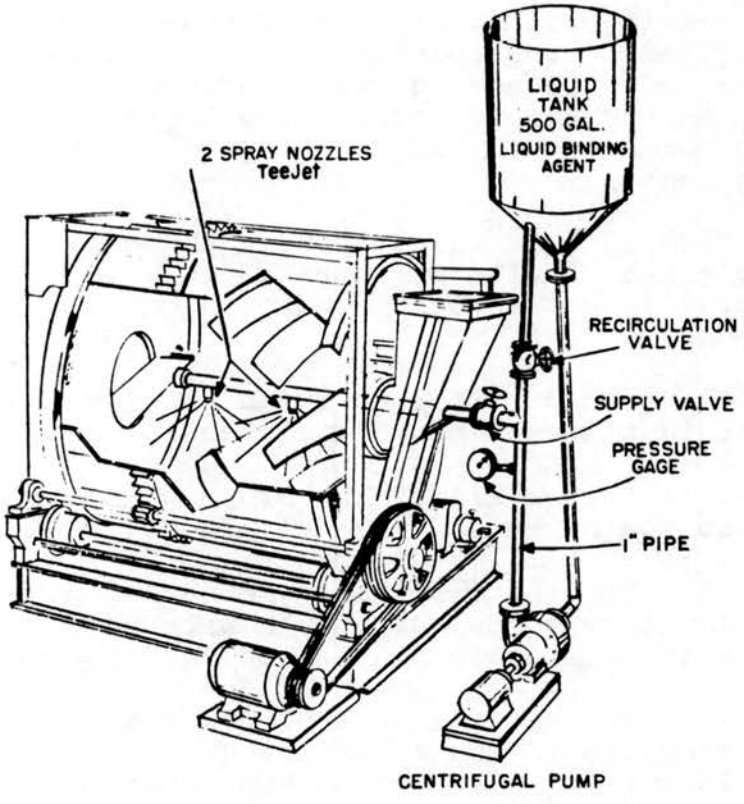
(3) Spray the liquid binder onto the moving bed of granules in the mixer using a line pressure of about 25 psi[8]. Spray time should be about one minute.

(4) Blend for one minute after spraying and then empty the mixer.

TVA and the industry have found that diesel and reclaimed motor oils are effective binders - normally, additions of these at 0.5 per cent of the product weight are adequate. Do not add oil or similar materials to mixtures of ammonium nitrate because of the potential hazards of fire and explosions. Also, diesel oils tend to "bleed" through paper bags, so reclaimed motor oil is better in this case.

Blended solid fertilizers containing powdered micronutrients stuck onto the granules by liquid binders should be applied to the field fairly soon after being made because storage for any length of time often results in the binder

FIGURE 19. Spray system for coating granules in rotary mixer



(Courtesy of TVA)

being absorbed into the granule - this causes the powdered micronutrient to drop off. Fertilizer solutions and water are more likely to cause caking than oils. (Oil can be and is often used as a dedusting agent.)

b. Pesticides

Adding a liquid pesticide to a blend is analogous to using oil as a binder for micronutrients. Of course, when calculating the formula for a guaranteed nutrient blend, "room" must be provided for the liquid. For calculating formulas containing a liquid pesticide, refer to Section C,4.

Concentrated or solid pesticides can be diluted or dissolved in a suitable solvent. (Caution! Take the necessary steps to prevent fires and wear the recommended protective clothing. Plant personnel must thoroughly understand the toxicity and flammability of the pesticide and its solvent and know what to do in case of skin contact or inhalation. See supplier's OSHA material safety data sheet for needed information including fire fighting.)

The pesticide solution (normally the commercially available - about 45 per cent solutions are used) must be compatible with materials in the blend, otherwise, the pesticide may degrade before the fertilizer is applied to the soil. (Caution! Many pesticides are organic and the same precautions in Section 7a should be followed.) Usually, application is within a few hours after the blend is made. If the pesticide-fertilizer blend is sticky or does not flow well, add 0.5-1.0 per cent of a conditioning agent[1] such as powdered kaolin, sierra, talc, attapulgite, etc., after the spraying is completed. Mix one to two minutes more.

After the granular fertilizer materials have been blended two minutes, spray the calculated amount of pesticide solution onto the moving bed of granules in the mixer at line pressure of about 20-25 psi. Spray time should be about one minute. Blend the mixture an additional minute and discharge.

The addition of granular pesticides to blended-solid fertilizers is not recommended. Density of granular pesticides is normally only about one-half that of fertilizer materials and particle size is smaller, so segregation will occur. In addition, dust from pesticide granules can be toxic to personnel in the mixing area[7] (Caution! Thoroughly clean all equipment used with a pesticide-fertilizer mixture before using for another grade.)

c. Grass Seed

These are added in some areas to custom mixes, especially for pastures. The seeds cannot, because of size and density, be uniformly dispersed in the fertilizer, but farmers and state officials are aware of this problem. Other seeds such as oats are also added.

Bulk blenders providing custom application equipment should be especially careful with their seed-fertilizer mixtures. Unless application equipment, augers, conveyor belts, and storage bins are completely cleaned after each seed-fertilizer mixture there will be contamination of seed in subsequent batches or loads. Such contamination can be highly detrimental to certified seed producers where mixing of crops results.

8. Tally and Batch Sheets

In order to keep up with what he is doing and/or has done, the operator should have tally or batch sheets (or tickets) on each grade and/or order filled for blended material. These tickets should show the precise amounts of materials in one batch or a sequence of batches containing the same amount of nutrients. The tickets or tally sheets should be retained in the office until the plant manager is sure there is no farmer or state official dissatisfaction about the blend. Examples of one type of blank and completed batch tickets are given in Figure 20.

FIGURE 20. An example of blank and completed batch tickets

BATCH TICKET

Grade

Nº 1524

Total Lbs. _____

Cust. Name _____

Seed	
33½-0-0	
Scale	
18-46-0	
Scale	
0-46-0	
Scale	
0-0-60	
Scale	
0-0-50	
Scale	
Scale	
Lime	
Total Lbs.	

NUMBER OF BATCHES

[ ]

Sample

BATCH TICKET

Grade 12-24-24

Nº 1522

Total Lbs. 16,000

Cust. Name John Doe

Seed	
33½-0-0	620
Scale	620
18-46-0	4,180
Scale	4,800
0-46-0	
Scale	
0-0-60	3,200
Scale	8,000
0-0-50	
Scale	
45-0-0 or anything	
Scale	
Lime	
Total Lbs.	

NUMBER OF BATCHES

[2]

SECTION F. HOUSEKEEPING

1. Appearance Value - Cross Contamination

Good housekeeping is vital. Appearance of the plant, as well as that of the product, is important to the farmer as well as to the state control official. It is a direct reflection on the quality of the operation, and can affect product quality, as well.

The blend should not only appear to be uniform but be free of foreign materials such as trash or chunks of other fertilizer material. Therefore, it is very important to see that each bin contains only one fertilizer material and that no material is cross-contaminated at the bottom of the bin (piles can run together due to sloppy payloader operation). The work alley used by the payloader and all plant equipment should be kept in reasonably clean condition while blends are being made. The equipment outside the plant and the general plant area will be impressive if kept in neat condition.

2. Bin Labeling

All bins of materials should be correctly labeled. Durable bin placards can be obtained from TFI at nominal cost. The photo on the following page is an example of such placards.

3. Payloader Alleys

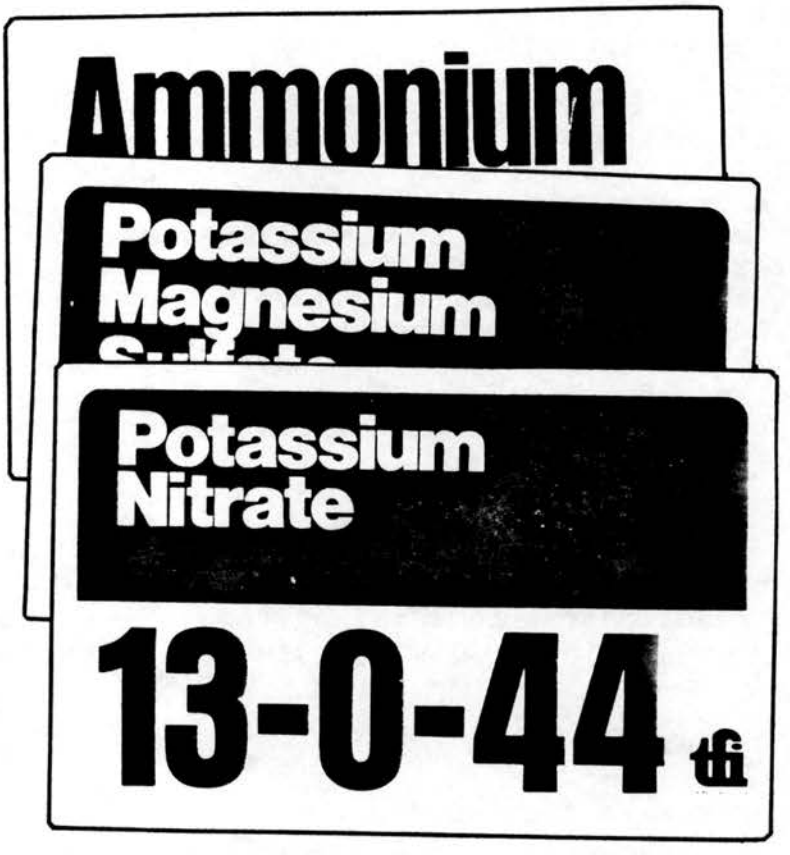
Keep workways free of fertilizer, debris, and moisture. Although difficult to achieve, this condition can be realized with good housekeeping practices, such as these:

a. Keep outside doors closed, especially when relative humidity is high.

b. Should workways accumulate moisture, scrape every several hours to remove the damp, hygroscopic material.

c. After each scraping apply an absorbent drying material. Do not leave these until they become sticky or slimy, but remove materials after they have absorbed one-third to one-half their weight in water.

Bin Placards Available From TFI



Several sources of absorbent materials are:

1. The Oil Dri Corp. of America
   520 N. Michigan Avenue
   Chicago, IL 60611

2. A. P. Green Refractories Company
   Subsidiary of U.S. Gypsum Company
   Oran, MO 63771

3. Floridin Company
   3 Penn Center
   Pittsburgh, PA 15235

4. Minerals & Chemicals Division
   Engelhard Minerals & Chemical Corp.
   Menlo Park
   Edison, NJ 08817

5. The Andersons
   Maumee, OH 43537

4. Dust and Toxicity Problems

All states now have regulations limiting the amounts of particulate matter that may be released into the air. Furthermore, the Occupational Safety and Health Act (OSHA) provides for the regulation of workroom environment, including protection of the health and safety of employees(9).

The blend plant manager needs to know and abide by his state environmental regulations regarding allowable contamination of the air outside and within blend plants. It may be necessary to install dust collectors. As previously indicated, most blended fertilizers can be "dedusted" to a considerable extent by spraying one-half a per cent oil onto the moving bed of granules in the blender such as shown in Figure 21(9). Materials such as ammonium polyphosphate solution are also effective. (Caution! See page 53 for precautions.)

Producers supplying solvents, oils, pesticides and products classified as hazardous materials, can furnish their customers with documents called OSHA Material Safety Data Sheets describing precautions required. It is suggested these data sheets be obtained and followed. It is most important to protect employees from pesticide inhalation and skin contact and to know what to tell the physician in cases involving pesticides.

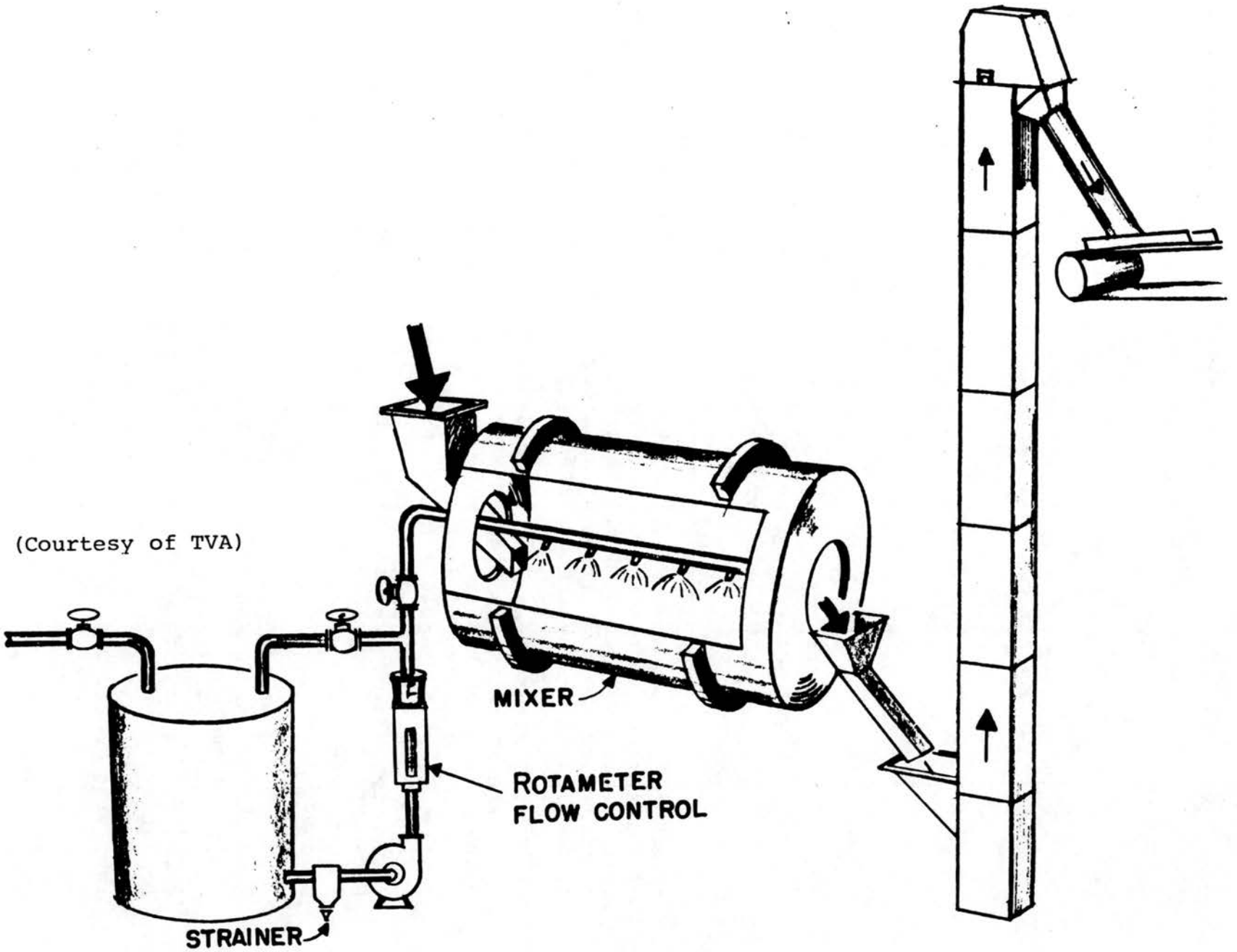


FIGURE 21. Dust control by liquid sprays

Tables 3, 4, 5, 6 and 7[10] on the following pages give the acute toxicity rating and possible effects of over-exposure to many of the materials used in fertilizer blend plants. TLV means "threshold level value" - any amount above the TLV is or can be harmful.

LD50 (lethal dose, 50 per cent) refers to the dose, expressed in weight of agent per unit weight of animal, which will cause death to 50 per cent of an exposed population of test animals. The type of animal and the method of administration are important factors.

5. Fire Prevention

Do not store or use explosive devices in or near a fertilizer blending plant. Ammonium nitrate, especially if contaminated with oil or carbonaceous materials, can be detonated. Do not store solvents and pesticides near ammonium nitrate!

Obtain a copy of NFPA No. 490 entitled, "Storage of Ammonium Nitrate," 1970, from the National Fire Protection Association, 60 Batterymarch Street, Boston, MA 02110. It also is available from The Fertilizer Institute. Chapter 7 covers fire protection, and Appendix A discusses fire fighting procedure with the first rule being to cool burning ammonium nitrate by applying large volumes of water while ventilating the area.

The types of fire extinguishers needed for extinguishing pesticide fires are given in the supplier's Material Safety Data Sheet. Foam and carbon dioxide extinguishers may be necessary for certain equipment or other types of fires. All electrical equipment and wiring should comply with local or national codes.

6. Covering Fertilizer Materials

It is important to tightly cover hygroscopic piles of materials with polyethylene (PE) sheeting, especially during periods of high relative humidity. Moisture picked up by ammonium nitrate, urea, or potash can result in caking of blends and deficiencies.

7. Scale Care and Standard Weights

As discussed under Sections D and E, scales must be kept clean and be certified by state weight inspectors. The plant should have its own set of standard weights to check weighing hoppers and platform scales. Check and, if necessary, adjust these weighing devices at least once daily.

Table 3. Toxicity/dose relationship in hazard potential

Toxicity	Dose	Hazard potential
High	High	High
High	Low	Intermediate
Low	High	Intermediate
Low	Low	Low

Table 4. Some bulk blend fertilizer materials

Material	Acute toxicity rating[a]	Possible effects of overexposure
Ammonium nitrate	Moderate	Broken skin & mucous tissue irritation. Allergenic reaction (13).
Ammonium nitrate sulfate	Moderate	Broken skin & mucous tissue irritation.
Ammonium sulfate	Moderate	Broken skin & mucous tissue irritation.
Ammonium phosphate nitrate	Moderate	Broken skin & mucous tissue irritation.
Diammonium phosphate	Moderate	Broken skin & mucous tissue irritation.
Superphosphate,high analysis[b]	Moderate	Broken skin & mucous tissue irritation.
Triple superphosphate[b]	Moderate	Broken skin & mucous tissue irritation.
Fluoride impurities	Very toxic to extremely toxic	Skin & mucous tissue irritant. Respiratory effects. Bone damage (6). TLV[c] 2.5 mg/m^3 (fluoride), 2mg/m^3 (HF), (15).
Potassium chloride	Moderate	Probably minimal. LD50[d], 2,430 mg/kg, rat, oral (5).
Urea	Practically nontoxic	Unknown. May be low hazard substance (7,13).
Limestone	Slight	"Inert" or "nuisance" dust when quartz content below 1%. TLV[c], 10 mg/m^3 (15).
Rice hulls	Unknown	Unknown
Sewage sludge	Unknown	Unknown

Table 5. Some secondary and micronutrients

Material	Acute toxicity rating	Possible effects of overexposure
Boron	Moderate to very toxic	Irritant. Borax LD50,oral mouse. 2,000 mg/kg (5). TLV (boron oxide)=10 mg/m^3 (15)
Magnesium oxide	Moderate	
Manganese oxide	Moderate	Central nervous system and respiratory effects. TLV=5 mg/m^3 (as Mn) (15)
Sulfur	Moderate	Irritant
Zinc oxide	Moderate	Fume may cause a mild transitory illness called "metal fume fever." ZnO powder as used in fertilizers probably has low hazard. TLV fume 5 mg/m^3 (15)
Zinc sulfate	Very toxic	Skin, mucous tissue, and respiratory irritant LD50 intraperitoneal, rat 40 mg/kg

[a]Scale: practically nontoxic,slightly toxic,moderately toxic,very toxic,extremely toxic,and super toxic.(3)
[b]Phosphate fertilizers may contain several percent by weight of fluoride impurity (5).
[c]TLV refers to threshold limit value of airborne contaminants (6).
[d]LD50 (lethal dose, 50%) refers to the dose, expressed in weight of agent per unit weight of animal, which will cause death to 50% of an exposed population of test animals.The type of animal and method of administration are important factors.

Table 6. Some fertilizer conditioners

Material	Acute toxicity rating	Possible effects of overexposure
Alumina silicates (zeolite)	Slightly toxic when quartz content <1% and toxic impurities are not present.	Unknown
Calcium carbonates	Low when impurities are not present.	Respiratory effects. "Inert" or "nuisance" dust. TLV = 10 mg/m^3 (15)
Calcium silicates	Slightly toxic when quartz content <1% and toxic impurities are not present.	Respiratory effects.
Diatomaceous earth	Moderate when quartz content <1%.	Respiratory effects. TLV = 20 million particles per ft^3 of air (15) LD50 3,160 mg/kg, oral, rat (5).
Kaolin	Slightly toxic when quartz content <1%.	Respiratory effects. TLV 10 mg/m^3 (15).
Surfactants	Depends on chemical composition. Most are probably moderately toxic.	Respiratory effects and mild skin irritation.

Table 7. Some pesticides used in bulk blending plants

Material	Use	Acute LD50, mg/kg
Aldrin (USDA)	Insecticide (persistent)	55, oral, rat (10)(TLV 0.25 mg/m^3)(15)
Dasanit[a]	Nematocide-insecticide	About 2-10, oral, rat;rapidly absorbed through skin (10)
Disulfoton (USDA)	Insecticide-acaricide	12.5(tech.)oral, rat (10)
Mocap[b]	Nematocide-soil insecticide)	80, oral, rat; 60, skin,rat(5
Nitralin (USDA)	Herbicide:preemergence	>2,000, oral, mouse, rat (10) >2,000, dermal, rabbit (10).
Phorate (USDA)	Insecticide-soil & systemic	2-4 (highly toxic) oral, male rat, about 630 dermal, guinea pig (10)
Tillam[c]	Preplant herbicide	1,120, oral, rat; >2,936 dermal, rabbit (10)
Trifluralin (USDA)	Herbicide: preemergence	>10,000 oral, rat (10)

[a]Trade name -- Chemagro Corp.
[b]Trade name -- produced by Mobil Chemical Co.
[c]Trade name -- Stauffer Chemical Co.

8. "Tight" Building Construction

A tight building is extremely important because it helps keep moisture away from fertilizer materials and plant equipment (much of which will rust and, as a result, malfunction). Therefore, building maintenance is extremely important and should receive top priority on days and periods when there is little or no commercial activity at the plant.

9. Spillage and Cross-Contaminated Fertilizer Materials

Clean waste fertilizer materials can be picked up and placed in a special bin (or barrels) labeled, "Waste - Not For Sale." There should be no problem salvaging this waste by randomly blending 25-50 pounds of it per ton.

10. Location of Nitrogen Bins

These materials tend to cake badly so, in horizontal bins, they should be the farthest from the door or, generally, near the mixer. When material is not being withdrawn from the pile, and especially in the case of ammonium nitrate, the nitrogen piles should be covered well with polyethylene (PE) sheeting. This helps control relative humidity and, therefore, caking.

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

IN THE MATTER OF THE PROPOSED RULES OF THE DEPARTMENT OF AGRICULTURE GOVERNING THE STORAGE AND HANDLING OF LIQUID COMMERCIAL FERTILIZER (3 MCAR S 1.0325)	))))	STATEMENT OF NEED AND REASONABLENESS

I. INTRODUCTION

The subject of this rulemaking is the proposed adoption by the Minnesota Department of Agriculture of a new rule governing the storage and handling of liquid commercial fertilizer. This rule is proposed for adoption pursuant to Minnesota Statutes section 17.725, Subdivision 1, which authorizes the Department to establish rules for the storage and handling of commercial fertilizers in Minnesota.

Rulemaking on the proposed rule was authorized by the Department on October 28, 1982. The Commissioner of the Minnesota Department of Agriculture determined that the proposed adoption of this rule would be noncontroversial in nature due to consultations with representatives of the fertilizer industry and governmental pollution control officials. Further, the Department received no responses to its notice to solicit outside opinion in this matter. However, due to the provisions of Minn. Stat. section 17.725, subd. 1, a public hearing will be held regarding the adoption of this rule.

The discussion provided in this statement is divided into the following parts:

Part II. General overview

Part III. Need for and reasonableness of the proposed rule

Part IV. Attachments

II. GENERAL OVERVIEW

A. The Need for Regulating the Storage and Handling of Liquid Commercial Fertilizer:

In order to understand the need for and reasonableness of this proposed rule, it will be useful to understand the current situation regarding liquid commercial fertilizers in Minnesota. Prior to 1982, the Department's jurisdiction extended primarily to fertilizer products themselves rather than to the condition of facilities in which they were produced. Facilities storing and handling liquid commercial fertilizers were not under the inspection or permitting authority of any agency of the state for purposes related to Minnesota Statutes Sections 17.711 to 17.729. In 1982, amendments to Minnesota Statutes sections 17.711 to 17.729 were passed which gave the Department of Agriculture new regulatory and inspection authority over these facilities. This move by the Legislature was prompted in part by the fact that within the preceding two years there have been approximately 20 releases of commercial fertilizers from facilities, about 15 of which have been releases of liquid commercial fertilizers. Laboratory tests subsequent to these releases, caused primarily by human error and equipment failure, have shown that surface and ground water in some cases had been adversely affected. Because of this and because of the Department's expertise in the area of agricultural chemicals, the Legislature accorded to the Department the new responsibility to approve fertilizer storage and handling facilities in addition to its prior responsibility for assuring fertilizer product quality.

The proposed rule is necessary for the Department to carry out its statutory responsibility to approve liquid commercial fertilizer storage and handling facilities. Based on administrative experience with releases of liquid commercial fertilizers as well as knowledge of fertilizer materials, the Department has become increasingly aware of the types of maintenance, safeguards and operations that will reduce the number of incidents and minimize their impact on human life, property and the environment when they do occur. The rule is also necessary to respond to public concern about such releases of liquid commercial fertilizers. It has been the Department's administrative experience that through field inspections and education of plant operators, the number of incidents will likely be decreased. The provisions in the rule are reasonable because they have been informally discussed with and agreed to by representatives of the fertilizer industry, other governmental agencies and fertilizer experts at the University of Minnesota.

Under the authority granted by Minnesota Statutes section 17.719, Subd. 4, the Department has begun to inspect liquid commercial fertilizer facilities and equipment to ensure that the provisions of Minnesota Statutes sections 17.711 to 17.729 are met. By the promulgation of this rule, the Department wishes to clarify for persons operating facilities its procedures for administering the 1982 additions to the law and to ultimately reduce the potential for incidents which will cause hazards to people's lives, adjoining property or the environment.

B. Format of the Proposed Rule:

The proposed rule is set forth in the following manner: Authority and purpose; definitions; approval of facility and equipment; previously established facilities; variances; maintenance and operations; safeguards; markings; incidents; exempt facilities; and enforcement.

In this statement, for the sake of brevity, the content of the rule has not been repeated, but the numbers of the parts of the rule have been noted for reference.

III. NEED FOR AND REASONABLENESS OF THE PROPOSED RULE

The need for and reasonableness of each part of the proposed rule follows.

3 MCAR S 1.0325 A. Authority and Purpose

This section is necessary and reasonable to clarify for readers and users the purpose of this rule governing the storage and handling of liquid commercial fertilizers used for agricultural purposes and the authority by which the commissioner proposes the adoption of the rule.

3 MCAR S 1.0325 B. Definitions

This part of the rule sets forth the definitions of terms used in the rule which are necessary to clarify meanings for readers and users of the rule. They are reasonable terms because they are terms familiar in the fertilizer industry. Some of the definitions were incorporated from Minnesota Statutes section 17.713, while the following definitions were included and developed specifically for this rule.

The definition of "appurtenances" is necessary to identify the scope of plumbing equipment included under the provisions of this rule. The definition of "department" is necessary to identify the lead state agency in the event of an incident. The definition of "facility" is necessary because it clarifies the parameters of the storage and handling site subject to approval and inspection by the commissioner. The definition of "incident" is necessary because it clarifies the scope of occurrences that might cause the release of liquid commercial fertilizers. The definition of "incident notification sign" is necessary to clarify that these signs are issued by the Department to assure uniformity of notification when an incident occurs. The definition of "liquid commercial fertilizer" is necessary because it clarifies the product subject to the provisions of this rule.

The definition of "responsible party" is necessary to identify the person who is responsible either to clean up the incident himself or to authorize others to do so. The definition of "safeguards" is necessary to clarify the criterion that containment systems must meet. The definition of "storage container" is necessary to distinguish between two storage methods: tanks and delivery equipment used for storage. The definition of "substantially altering" is necessary because it identifies the type of facility modifications that require the Department's approval.

3 MCAR S 1.0325 C. Approval of Facility and Equipment

This part of the rule contains two sections, the first pertains to the approval of new plants and the second pertains to the inspection of both newly approved and existing plants. The first section is authorized by Minnesota Statutes section 17.7155 and is necessary to assure that facilities built to handle and store liquid commercial fertilizers are adequate. The type of information the Department will require of applicants is contained in Attachment A. This information will be verified by a Department inspector before approval is granted. While certain information will always be required by the Department, it is impossible to specify by rule all the information that may be required in particular cases because the technology in the industry is changing so rapidly that different information could well be required for each individual facility.

The second section of this part of the rule is necessary to inform persons operating facilities that the commissioner will act when inspection reveals that safeguards are insufficient to protect against hazards. The course the commissioner will follow is contained in Minnesota Statutes section 17.728, which is referenced in the rule.

Both sections of this part of the rule are reasonable because they are of benefit to industry, the public, and the environment. When liquid commercial fertilizer facilities are properly constructed, maintained, and operated, persons operating them suffer less financial loss from product loss, the health of the public is better protected, and adverse effect on the environment is minimized where not eliminated altogether.

3 MCAR S 1.0325 D. Previously Established Facilities

This part of the rule is necessary to inform persons operating liquid commercial fertilizer facilities established prior to the adoption of this rule of the schedule by which the commissioner will review and approve such facilities. Prior to 1982, many such facilities were issued permits by the Minnesota Pollution Control Agency and the renewal schedule for these facilities was the same as the one presented here. In 1982, the Minnesota Legislature gave the Department of Agriculture the responsibility to approve facilities for storing and handling commercial fertilizers and the two agencies have concurred that the same renewal schedule will be used for the Department of Agriculture's approvals.

The schedule is reasonable because the oldest facilities are required to seek approval from the commissioner first, due to their greater potential for creating hazards to human life, adjoining property or the environment. This phased renewal schedule will be less of a burden to newer facilities more recently approved, and also be less of a burden to the Department of Agriculture because inspection and administrative work will be spread out over a period of time rather than causing backlogs which would be further burdensome to the industry.

3 MCAR S 1.0325 E. Variances

This part of the rule is necessary to inform persons applying for approval of a new or substantially altered facility that a variance from certain parts of the rule may be requested provided that the variance meets both of the following criteria: adherence to the rule would cause economic hardship and the requested use does not constitute a hazard to people's lives, adjoining property or the environment. Minnesota Statutes section 15.0412, subd. 1a. permits a department to issue variances to rules provided that such criteria are provided in the rule.

Variances are reasonable because they will provide a method for persons operating a liquid commercial fertilizer facility to present additional evidence that compliance with the rule might be an economic hardship and non-compliance would not create hazards to human life, adjoining property or the environment. It is further reasonable that the Department provide the person requesting a variance a response within a prescribed time frame.

3 MCAR S 1.0325 F. Maintenance and Operations

This part of the rule contains five sections. The first section, regarding the maintenance and operation of the facility and its safeguards and equipment, is necessary to inform persons operating facilities of a general standard for conducting operations.

The second section of this part of the rule, regarding provisions for the proper maintenance of above-ground piping, is necessary because liquid fertilizers flow through pipes, and a rupture to such pipes would result in an incident. Thus, it is important that such piping be protected from possible damage.

The third section of this part of the rule, regarding the location and operation of main valves, is necessary because if the main valve is located near the source of the liquid commercial fertilizer, in the event of an incident, less of the liquid commercial fertilizer will be released than if the main valve were located along a pipe. It is necessary also that the main valve be locked or shut down when the facility is unattended in order to protect against possible vandalism. It is reasonable to permit persons operating the facilities either to lock the main valve in some manner or to put up fencing around the facility to prevent tampering when the facility is unattended.

The fourth section of this part of the rule, regarding the protection of appurtenances from rust and corrosion, is necessary because fertilizers are generally rather corrosive materials. If rust is not held in check, a rupture is possible which would result in an incident.

The fifth section of this part of the rule regarding the requirements that storage container areas must be kept free of clutter including grass and weeds is necessary to prevent, when possible, a fire-related incident. It is also necessary to keep the area around facilities free of clutter and debris so that this material will not interfere with emergency personnel in the event of an incident.

All of the provisions in this part of the rule are reasonable because they will prevent the industry from losing product or having to pay the clean up costs of incidents, and they will prevent, insofar as equipment goes, damage to the environment.

3 MCAR S 1.0325 G. Safeguards

This part of the rule requiring the installation of safeguards is necessary to prevent the escape into the environment of the liquid commercial fertilizer should a rupture in equipment occur and to minimize the possible damage to the environment should an incident occur. It is also necessary that the capacity of the safeguard system be as large as the capacity of the largest tank so that if any of the smaller tanks rupture, the product would be containable because there is adequate capacity. It is not likely that more than one tank would rupture at a time, thus this standard should be sufficient for containment.

This requirement is reasonable because the safeguards will protect the environment, and will also mean less product loss to industry since liquid commercial fertilizers can be recovered from safeguard systems without loss of effectiveness.

3 MCAR S 1.0325 H. Markings

This part of the rule contains three sections. The first section regarding the label on each storage container is necessary because it is a requirement of Minnesota Statutes section 17.716, subd. 5, and it aids employees of the facilities in avoiding incorrect formulations of fertilizers. These markings are particularly important so that individuals responding in an emergency who may not be familiar with the liquid commercial fertilizers will be able to accurately identify the product when notifying emergency personnel of an incident.

The second section of this part of the rule, regarding the requirement that the identification sign be placed conspicuously in the facility, is necessary so that any individual, whether familiar or unfamiliar with the facility and its operations, can alert a representative of the facility in the event of an incident or other emergency. It is a reasonable requirement so that action can be taken quickly even if the facility is unattended.

The third section of this part of the rule regarding the incident notification sign is necessary to identify for employees of the facility emergency personnel to contact in the event of an incident. It is reasonable to provide for a uniform method of response to incidents so that potential hazards to people's lives, adjoining property or the environment are reduced.

3 MCAR S 1.0325 I. Incidents

This part of the rule is necessary to inform persons owning or operating a liquid commercial fertilizer facility in Minnesota of their statutory responsibility under Minnesota Statutes section 17.7285 if an incident should occur and clarifies the role of the Department and other state agencies in responding to incidents.

It is reasonable to have such procedures in order to expedite the containment and clean up of the result of the incident and ultimately minimize the cost of clean up and hazards to people's lives, adjoining property, or the environment.

It is also necessary and reasonable that the Department clarify the extent of its liability with respect to incident clean up or containment for the information of all parties involved in an incident.

3 MCAR S 1.0325 J. Exempt Facilities

This part of the rule exempting anhydrous ammonia facilities and portable or nonstationary tanks is necessary because the provisions in this rule for liquid commercial fertilizer are not applicable in these two instances. Although anhydrous ammonia is a liquid under pressure, it is a gas under normal atmospheric conditions and it requires different handling, equipment and safeguards. It is also currently subject to other rules of the Department. It is not reasonable to have the provisions of this rule regarding liquid commercial fertilizer apply to this fertilizer because it is a substantially different substance.

It is necessary and reasonable to exempt portable and nonstationary tanks from the provisions of this rule, since they are mobile units and would not have permanent piping, appurtenances or safeguards requiring maintenance and operating procedures as outlined in this rule.

3 MCAR S 1.0325 K. Enforcement

This section of the rule is necessary to inform persons operating facilities subject to this rule of the commissioner's intent to act and procedures for the commissioner's action in instances where provisions of this rule are not met. Further, it is necessary to inform persons operating liquid commercial fertilizer facilities of their rights should they fail to meet the requirements of the rule.

This section is reasonable since the persons are entitled to know the consequences of failing to meet the provisions of the rule and are also entitled to know that the commissioner will proceed in the same fair manner, affording opportunities for hearings before canceling approvals, when provisions of this rule are not met.

IV. ATTACHMENTS

The following attachments are related to the material in this statement and are appended.

Attachment A - Questions to be asked on the Application for Approval of a Liquid Commercial Fertilizer Facility

Attachment B - Sample "Incident Notification Sign" for Liquid Commercial Fertilizer Facilities

Attachment C - Memorandum of Understanding Regarind Procedures for Handling Pesticide and Plant Food Emergencies

Attachmend D - Existing Diking Requirements of the Minnesota Pollution Control Agency

Attachment E - Proposed Rules of the Minnesota Pollution Control Agency Relating to Storage of Liquid Substances Capable of Polluting Waters of the State (Draft, November, 1981)

QUESTIONS TO BE ASKED ON THE APPLICATION FOR APPROVAL OF A LIQUID COMMERCIAL FERTILIZER FACILITY

1) Firm making application: Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

2) Firm who will operate facility: Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

3) Firm who will construct/install/modify site:

Name _____

Address _____

City _____ State _____ Zip _____ Phone No. _____

4) ☐ New ☐ Existing ☐ Substantially Altering

5) Location of site: County _____ City _____ Township _____

(Legal Description _____

_____?)

6) Does this construction/installation/modification require a local permit?

☐ Yes ☐ No If yes, submit a copy.

7) Size of lot owned or leased: _____

8) Surface water *(give approximate distance to nearby lake, stream, drainage ditch, or storm drain into which liquid could flow, and identity of same):*

_____

_____

9) Soil and groundwater conditions *(state general soil type at the site such as clay, gravel, sand, loam, peat, etc.; and type and proximity of wells on or near the site):*

_____

_____

10) Nature of terrain *(check one):*

☐ Level area ☐ Hilltop ☐ Hillside or steep slope

☐ Slight slope ☐ Valley ☐ Natural depression with no outlet

11) Number and capacity of storage containers:

New _____; Existing _____;

Substantially Altering _____

12) Type of storage containers *(steel, poly, etc.)*: _____

_____

13) Type of safeguard *(check one)*:

☐ Dike, describe in detail: _____

_____

☐ Other, describe in detail: _____

_____

NOTE: Provide drawing or pictures of similar safeguards if possible.

14) Submit three (3) scale drawings of the facility, including other storage containers and buildings.

15) Submit a plumbing diagram showing location and type of pumps and valves used to control all transferring.

16) Is there an existing contingency plan with the local fire and law enforcement personnel? *(check one)*

☐ Yes, briefly describe and indicate how often it is tested and reviewed:

_____

_____

_____

☐ No (If a contingency plan does not exist, one should be established within 90 days of the completed construction.)

MEMORANDUM OF UNDERSTANDING

REGARDING PROCEDURES FOR HANDLING PESTICIDE AND PLANT FOOD EMERGENCIES

It is recognized that pesticides, including but not limited to, insecticides, herbicides, rodenticides, fungicides, and plant food materials (fertilizers), including anhydrous ammonia, may be hazardous to the safety of the public and the environment when involved in an emergency situation. It is further recognized that appropriate, efficient procedures and plans must be implemented as rapidly as possible with the occurrence of an emergency involving these materials. It is recognized that a clear understanding of respective agency responsibilities will hasten implementation of such procedures and plans.

The purpose of this Memorandum of Understanding is to establish and clarify procedures to be followed by state agencies upon the occurrence, or threat of occurrence, of accidents, spills, fires, floods, poisonings, exposures, leaks, or other similar emergencies involving pesticides and plant food materials (fertilizers).

1) There is hereby established an "Agricultural Chemical Emergency Response Team". This team shall be composed of representatives of each of the following agencies:

   Minnesota Department of Agriculture

   Minnesota Pollution Control Agency

   Minnesota Department of Natural Resources

   Minnesota Department of Health

   Minnesota Division of Emergency Services (Department of Public Safety)

   Minnesota Department of Transportation

2) The Minnesota Department of Agriculture is hereby designated as the lead coordinating agency for the Agricultural Chemical Emergency Response Team. The department shall be responsible for the coordination of plans and procedures to deal with pesticide and fertilizer emergencies.

3) Government regulatory agencies and affected industry will be notified of the contents of the Memorandum by the lead coordinating agency.

4) The lead coordinating agency shall immediately contact all team members upon notification of an emergency.

5) Any Emergency Response Team member shall immediately notify the lead coordinating agency as to the occurrence of an emergency.

6) The lead coordinating agency may call upon other appropriate local, state, and federal agencies for assistance in the handling of such emergencies.

7) The Minnesota Department of Agriculture shall be a designated agent of the Minnesota Pollution Control Agency, pursuant to Minnesota Statute 115.061, regarding this type of emergency. This will facilitate a coordinated response to the emergency.

8) The Emergency Response Team shall develop guidelines and procedures for the implementation of practical and efficient measures to handle emergencies when they occur.

9) Responsibilities and procedures outlined herein shall be effective immediately upon the signing of this Memorandum of Understanding by all agencies, and shall remain in effect until January 1, 1983. At least thirty (30) days prior to January 1, 1983, the representatives to the Agricultural Chemical Emergency Response Team shall meet to discuss continuation, modification, or termination of this Memorandum of Understanding.

10) In the event of a "large scale" emergency, such as a fire involving large quantities of pesticides, a predetermined organizational structure shall go into effect in order to respond to the situation in the most efficient manner.

11) As soon as possible, after each "large scale" emergency, the lead coordinating agency shall conduct a debriefing session.

FOR MINNESOTA DEPARTMENT OF AGRICULTURE:

Mark W. Seltz
Commissioner

1/4/82
Dated

FOR MINNESOTA DEPARTMENT OF NATURAL RESOURCES:

Joseph N. Alexander
Commissioner

6 Jan 82
Dated

FOR MINNESOTA DIVISION OF EMERGENCY SERVICES:

Kenneth A Pauch
Director

1/6/82
Dated

FOR MINNESOTA POLLUTION CONTROL AGENCY:

Louis Breimhurst
Executive Director

1/6/82
Dated

FOR MINNESOTA DEPARTMENT OF HEALTH:

George R Petterson
Commissioner

Jan 15, 1982
Dated

FOR MINNESOTA DEPARTMENT OF TRANSPORTATION:

M Braun
Commissioner

1/13/82
Dated

ORGANIZATIONAL STRUCTURE

FOR HANDLING "LARGE SCALE" EMERGENCIES INVOLVING PESTICIDES AND FERTILIZERS

It is recognized that preplanning and assignment of various responsibilities is very desirable when dealing with a "large scale" incident involving many people and agencies. The following officers are named and understand their duties described below prior to the incident. Along with a lead officer, a secondary officer shall also be named. In most or all cases, the secondary officer should be from a different agency (to encourage interaction and cooperation). There is an alternate individual named for each lead and secondary officer.

ADMINISTRATIVE AND PUBLIC INFORMATION OFFICER Named from MDA (a high level administrator). Secondary officer from MPCA. Will be charged with the overall handling of the incident on the state level. Responsible for the following:

1) Shall make initial contacts with involved individuals to set guidelines for the clean up.

2) Shall maintain contacts with local officials, state officials, federal officials, and the Governor's Office, giving up-to-date progress reports as needed.

3) Shall deal with the affected parties on major items of concern resulting from the emergency (time schedule, financial responsibility, etc.).

4) Shall be the only state official designated to provide information to the news media. Media contacts to other officers or state agencies represented within this Memorandum shall be referred to this individual. This individual shall receive information from the FIELD OFFICER IN CHARGE and other field staff.

5) Shall make the final decision regarding disposal or other areas where there may not be complete agreement among state agencies. This would involve consultation with administrators of the other involved state agencies.

6) Shall coordinate with the Division of Emergency Services (Public Safety) in developing requests for financial assistance from the Executive Council.

FIELD OFFICER IN CHARGE Named from MPCA. Secondary officer from MDA. Will spend most of the time immediately following the incident on the site or at the state agency command post. Responsible for the following:

1) Shall direct operations at the site so that decisions and directions made by members of the organizational structure are carried out.

2) Shall report to and regularly update the administrative officer.

3) Shall coordinate activities of the officers named herein.

4) Shall communicate with pollution control personnel, on both the local and federal level, when involved at the site.

5) During the Incident. The fire department and the responsible party are responsible for containment and minimizing environmental contamination at the scene of an incident. If the fire department is not trained in this area, the FIELD OFFICER IN CHARGE, if present, shall direct containment and/or other measures in cooperation with the fire department. In the case of a fire, this may involve plugging drains or sewers, diking, and reducing the amount of water used. Thus, the FIELD OFFICER IN CHARGE should have contacts for heavy equipment, pumps, tanker trucks, etc.

6) Following the Incident. After the fire department has left, it is up to the responsible party to maintain containment and minimize pollution. The responsible party shall also take the necessary steps to insure proper clean-up and disposal of the materials involved (includes, but not limited to, concentrated pesticides, contaminated soil, building debris, and runoff water).

7) Shall determine which products can be salvaged for subsequent sale or use. May be necessary to place stop sale on damaged or contaminated products such as feeds, fertilizers, pesticides, or seeds.

8) Shall maintain a single log of all samples collected and laboratory reports. All samples taken for laboratory analysis during and after the emergency will be channeled through the FIELD OFFICER IN CHARGE on duty.

9) Shall check with the Minnesota Department of Transportation, Hazardous Waste Section, concerning transportation of debris.

SAFETY OFFICER Named from MDH.

1) During the Incident. MDH SAFETY OFFICER will be at the scene of the incident and shall advise the fire department and/or FIELD OFFICER IN CHARGE in the following areas:

   A) The protection of firefighters and other emergency and/or containment personnel from exposure through use of proper equipment.

   B) The determination of need for evacuation of the surrounding area.

   C) The monitoring of the exposure and decontamination of emergency and/or containment personnel.

   D) The monitoring of area security.

   E) The notification of local hospitals to prepare them for possible affected individuals.

   The fire department may not be trained in the above areas. If present during the incident, the SAFETY OFFICER shall direct the above in cooperation with the fire department.

2) Following the Incident. After the fire department has left, it is up to the responsible party to maintain the security of the area. The SAFETY OFFICER shall work with the FIELD OFFICER IN CHARGE to see that this is done. During containment and clean-up operations the SAFETY OFFICER shall monitor the use of proper safety equipment. The SAFETY OFFICER shall also monitor the exposure and decontamination of all persons involved.

ENVIRONMENTAL OFFICER Named from the DNR. Secondary officer from MPCA. The ENVIRONMENTAL OFFICER shall assist and advise the FIELD OFFICER IN CHARGE regarding environmental concerns. Responsible for the following:

1) During the Incident.

   A) The assessment of drainage and/or runoff patterns from the site to public water.

   B) The collection of samples to determine if materials from the site have entered public waters.

2) Following the Incident.

   A) The assessment of environmental damage.

      a) Kills or contamination of fish and wildlife.

      b) Damage to fish and wildlife habitat.

   B) Assist in sampling to determine the kinds and amounts of materials that may have left the site.

   C) Advise as to likely effects of proposed disposal practices on fish and wildlife or their habitat.

RESOURCE OFFICER Named from Division of Emergency Services, DPS. Secondary officer from DOT, Office of Rates and Regulations. Responsible for the following:

1) Upon notification by the lead agency, or incident/accident responder, the Division of Emergency Services Duty Officer or designee will back-up lead agency and notify all other agencies or team responders on the call list.

2) Upon completion of the call list, DES will inform the lead agency as to the status of notification and the availability of the State Emergency Operation Center for use as the incident/accident command post if needed.

3) Shall log all data, information, requests, and notifications that have been directed to the Division of Emergency Services.

4) Shall assist the lead agency in preparation of financial requests under Minnesota Statutes Chapter 9, if assistance is appropriate.

5) Shall prepare status reports as needed.

6) Shall provide a complete log of DES activities/actions to the lead agency and initial team responder.

TRANSPORTATION OFFICER Named from DOT. Secondary officer from MDA. Will spend most of the time immediately following the incident on the site or at DOT headquarters. Responsible for the following:

1) Shall coordinate with the lead agency, the transportation of hazardous material or contaminated debris from the incident site to its final destination (hazardous waste disposal site, land application site, etc.).

LARGE SCALE EMERGENCIES OFFICERS FOR 1982 SHALL BE AS FOLLOWS:

LEAD OFFICER	SECONDARY OFFICER
ADMINISTRATIVE AND PUBLIC INFORMATION OFFICER:	
John Baumgartner Assistant Commissioner Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 296-9310 *Home Phone:* (612) 739-3648	Russ Felt, Acting Chief Enforcement Section Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7755 *Home Phone:* (612) 724-7254 *(24 Hr. Emergency Response:* (612) 296-7373*)*
ALTERNATE:	
William Bulger, Director Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 296-1161 *Home Phone:* (612) 645-2329	Dick Kable, Head Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West Plato Boulevard Roseville, Minnesota 55113 *Office Phone:* (612) 296-7235 *Home Phone:* (612) 434-6547 *(24 Hr. Emergency Response:* (612) 296-7373*)*
FIELD OFFICER IN CHARGE:	
Dick Kable, Head Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7235 *Home Phone:* (612) 434-6547 *(24 Hr. Emergency Response:* (612) 296-7373*)*	Dave Dally Pesticide Control Specialist Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 297-2528 *Home Phone:* (612) 459-6486
ALTERNATE:	
Bob Dullinger Emergency Response Unit Division of Water Quality Pollution Control Agency 1935 West County Road B2 Roseville, Minnesota 55113 *Office Phone:* (612) 296-7367 *Home Phone:* (612) 699-9487 *(24 Hr. Emergency Response:* (612) 296-7373*)*	Larry Palmer Pesticide Control Specialist Agronomy Services Division Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, Minnesota 55107 *Office Phone:* (612) 297-2530 *Home Phone:* (612) 755-7624

LEAD OFFICER

SECONDARY OFFICER

SAFETY OFFICER:

David Gray, Chief
Minnesota Department of Health
Section of Health Risk Assessment
Division of Environmental Health
717 Delaware Street Southeast
Minneapolis, Minnesota 55440

Office Phone: **(612) 296-5352**
Home Phone: **(612) 699-7004**

Charles B. Schneider, Chief
Minnesota Department of Health
Section of Environmental Field Services
Division of Environmental Health
717 Delaware Street Southeast
Minneapolis, Minnesota 55440

Office Phone: **(612) 296-5335**
Home Phone: **(612) 560-6543**

ALTERNATE:

Larry Gust
Minnesota Department of Health
Section of Health Risk Assessment
Division of Environmental Health
717 Delaware Street Southeast
Minneapolis, Minnesota 55440

Office Phone: **(612) 296-5325**
Home Phone: **(612) 789-2610**

ENVIRONMENTAL OFFICER:

Howard F. Krosch, Supervisor
Monitoring and Control Unit
Fish and Wildlife Division
Department of Natural Resources
Third Floor, Centennial Building
St. Paul, Minnesota 55155

Office Phone: **(612) 296-2835**
Home Phone: **(612) 436-5405**

Marvin Hora, Head
Monitoring and Toxic Substances Unit
Pollution Control Agency
1935 West County Road B2
Roseville, Minnesota 55113

Office Phone: **(612) 296-7396**
Home Phone: **(612) 574-9879**

ALTERNATE:

David Zappetillo
Monitoring and Control Unit
Fish and Wildlife Division
Department of Natural Resources
Third Floor, Centennial Building
St. Paul, Minnesota 55155

Office Phone: **(612) 296-2835**
Home Phone: **(612) 770-6695**

Harold Wiegner
Pollution Control Specialist
Pollution Control Agency
1935 West County Road B2
Roseville, Minnesota 55113

Office Phone: **(612) 296-7320**
Home Phone: **(612) 457-8571**

RESOURCE OFFICER:

Duty Officer

Office Phone: **(612) 778-0800**

Richard E. Moulton
Hazardous Materials Safety Committee
Department of Public Safety
Division of Emergency Services
B-5 State Capitol
St. Paul, Minnesota 55155

Office Phone: **(612) 296-0459**

LEAD OFFICER

Pete Marcotte
Hazardous Materials Specialist
Minnesota Department of Transportation
Room 404
Transportation Building
St. Paul, Minnesota 55155

Office Phone: (612) 296-8958
(612) 296-7115

Home Phone: (612) 689-4768

SECONDARY OFFICER

ALTERNATE:

Ray Jones
Hazardous Materials Specialist
Minnesota Department of Transportation
Room 404
Transportation Building
St. Paul, Minnesota 55155

Office Phone: (612) 296-8958
(612) 296-7115

Home Phone: (612) 257-6588

TRANSPORTATION OFFICER:

Pete Marcotte
Hazardous Materials Specialist
Minnesota Department of Transportation
Room 404
Transportation Building
St. Paul, Minnesota 55155

Office Phone: (612) 296-8958
(612) 296-7115

Home Phone: (612) 689-4768

Dave Dally
Pesticide Control Specialist
Agronomy Services Division
Minnesota Department of Agriculture
90 West Plato Boulevard
St. Paul, Minnesota 55107

Office Phone: (612) 297-2528

Home Phone: (612) 459-6486

ALTERNATE:

Ray Jones
Hazardous Materials Specialist
Minnesota Department of Transportation
Room 404
Transportation Building
St. Paul, Minnesota 55155

Office Phone: (612) 296-8958
(612) 296-7115

Home Phone: (612) 257-6588

AGRICULTURAL CHEMICALS EMERGENCY RESPONSE CALL LIST

PRIMARY LIST

MINNESOTA DEPARTMENT OF AGRICULTURE

David W. Dally	*Office*	(612) 297-2528
	Home	(612) 459-6486
Larry P. Palmer	*Office*	(612) 297-2530

MINNESOTA POLLUTION CONTROL AGENCY

Dick Kable	*Office*	(612) 296-7235
	Home	(612) 434-6547
Bob Dullinger	*Office*	(612) 296-7367
	Home	(612) 699-9487
Kevin Faus	*Office*	(612) 296-7709
	Home	(612) 872-7847
24-Hour		(612) 296-7373
Air Quality		(612) 296-7371

MINNESOTA DEPARTMENT OF PUBLIC SAFETY, EMERGENCY SERVICES DIVISION

Emergency Services 24-Hour		(612) 778-0800

MINNESOTA DEPARTMENT OF TRANSPORTATION

Pete Marcotte	*Office*	(612) 296-8958
	Home	(612) 689-4768
Ray Jones	*Office*	(612) 296-7115
	Home	(612) 257-6588

MINNESOTA DEPARTMENT OF TRANSPORTATION, EMERGENCY OPERATION CHIEF

Dennis Springer	*Office*	(612) 296-3072
	Home	(612) 455-6771
24-Hour		(612) 296-3334

MINNESOTA DEPARTMENT OF HEALTH

David Gray	*Office*	(612) 296-5352
	Home	(612) 699-7004
Charles Schneider	*Office*	(612) 296-5335
	Home	(612) 560-6543
Larry Gust	*Office*	(612) 296-5325
	Home	(612) 789-2610

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Howard Krosch	*Office*	(612) 296-0778
	Home	(612) 436-5406
Dave Zappetillo	*Office*	(612) 296-0783
	Home	(612) 770-6695

NATIONAL RESPONSE CENTER ..... 1-(800) 424-8802

AGRICULTURAL CHEMICALS EMERGENCY RESPONSE CALL LIST

SECONDARY LIST

AMERICAN RED CROSS	
Disaster Personnel.....	(612) 291-6787
UNITED STATES COAST GUARD.....	(612) 725-7452
UNITED STATES FISH AND WILDLIFE SERVICE	
Regional Office.....	(612) 725-3585
Environmental Field Office.....	(612) 725-7131
CHEMTREC.....	1-(800) 424-9300
UNITED STATES FOOD AND DRUG ADMINISTRATION.....	(612) 725-2121
MINNESOTA POISON CONTROL CENTER.....	(612) 347-3141

TELEPHONE NUMBERS FOR PESTICIDE MANUFACTURERS ARE ON FILE WITH THE MINNESOTA DEPARTMENT OF AGRICULTURE, (612) 297-2528.

MINNESOTA POLLUTION CONTROL AGENCY
REGIONAL OFFICES

REGION I - DULUTH

John Pegors, Regional Director
Robert Beresford, Reg. Specialist
Tim Jusick, Reg. Specialist
Lyle Hobbs, Reg. Specialist
Helen Phillips, Secretary

314 West Superior Street
1015 Torrey Building
Duluth, Minnesota 55802
(218) 723-4660
Tie Line: 8-101-4660

Counties: Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, St. Louis

****

REGION II - BRAINERD

Larry Shaw, Regional Director
Don Adams, Reg. Specialist
Stan Kalinoski, Reg. Specialist
Shirley Martin, Secretary

304 East River Road
Suite 3
Brainerd, Minnesota 56401
(218) 828-2492
Tie Line: 8-111-2492

Counties: Benton, Cass, Chisago, Crow Wing, Isanti, Kanabec, Mille Lacs, Morrison, Pine, Sherburne, Stearns, Todd, Wadena, Wright

****

REGION III - DETROIT LAKES

Willis Mattison, Regional Director
Larry Olson, Reg. Specialist
John Matlock, Reg. Specialist
Sharron Ross, Secretary

116 East Front Street
Detroit Lakes, Minnesota 56501
(218) 847-2164
Tie Line: 8-175-76

Counties: Becker, Beltrami, Clay, Clearwater, Douglas, Grant, Hubbard, Kittson, Lake of the Woods, Mahnomen, Marshall, Norman, Ottertail, Pennington, Polk, Pope, Red Lake, Roseau, Stevens, Traverse, Wilkin

****

REGION IV - MARSHALL

Larry Johnson, Regional Director
Hank Steffen, Reg. Specialist
Mark Oemichen, Reg. Specialist
Sharry Vandewiehle, Secretary

Box 286
1104 East College Drive
Marshall, Minnesota 56258
(507) 537-7146
Tie Line: 8-105-7146

Counties: Big Stone, Chippewa, Cottonwood, Jackson, Kandiyohi, Lac Qui Parle, Lincoln, Lyon, McLeod, Meeker, Murray, Nobles, Pipestone, Redwood, Renville, Rock, Swift, Yellow Medicine

****

REGION V - ROCHESTER

Larry Landherr, Regional Director
Dave Read, Reg. Specialist
Don Abrams, Reg. Specialist
Cory Landgren, Reg. Specialist
Carol Vandevelde, Secretary

1200 South Broadway
Suite 140
Rochester, Minnesota 55901
(507) 285-7343
Tie Line: 8-103-7343

Counties: Brown, Blue Earth, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Houston, LeSueur, Martin, Mower, Nicollet, Olmsted, Rice, Sibley, Steele, Wabasha, Waseca, Watonwan, Winona

****

METRO COUNTIES: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

REGIONAL OFFICES

METRO

Howard F. Krosch or David Zappetillo
Monitoring and Control Unit
Fish and Wildlife Division
Department of Natural Resources
Third Floor, Centennial Building
St. Paul, Minnesota 55155

Office: (612) 296-2835
Home (Krosch): (612) 436-5405
Home (Zappetillo): (612) 770-6695

REGION #1

Department of Natural Resources
Route #5, Box 4A
Bemidji, Minnesota 56601

North Star Network No.: 110-3959
Direct: (218) 755-3959

REGION #2

Department of Natural Resources
1201 East Highway #2
Grand Rapids, Minnesota 55744

North Star Network No.: 117-344
Direct: (218) 326-0311

REGION #3

Department of Natural Resources
424 Fronts
Box 648
Brainerd, Minnesota 56401

North Star Network No.: 111-2624
Direct: (218) 828-2624

REGION #4

Department of Natural Resources
Highway #15 South, Box 756
New Ulm, Minnesota 56073

North Star Network No.: 172-225
Direct: (507) 354-2196

REGION #5

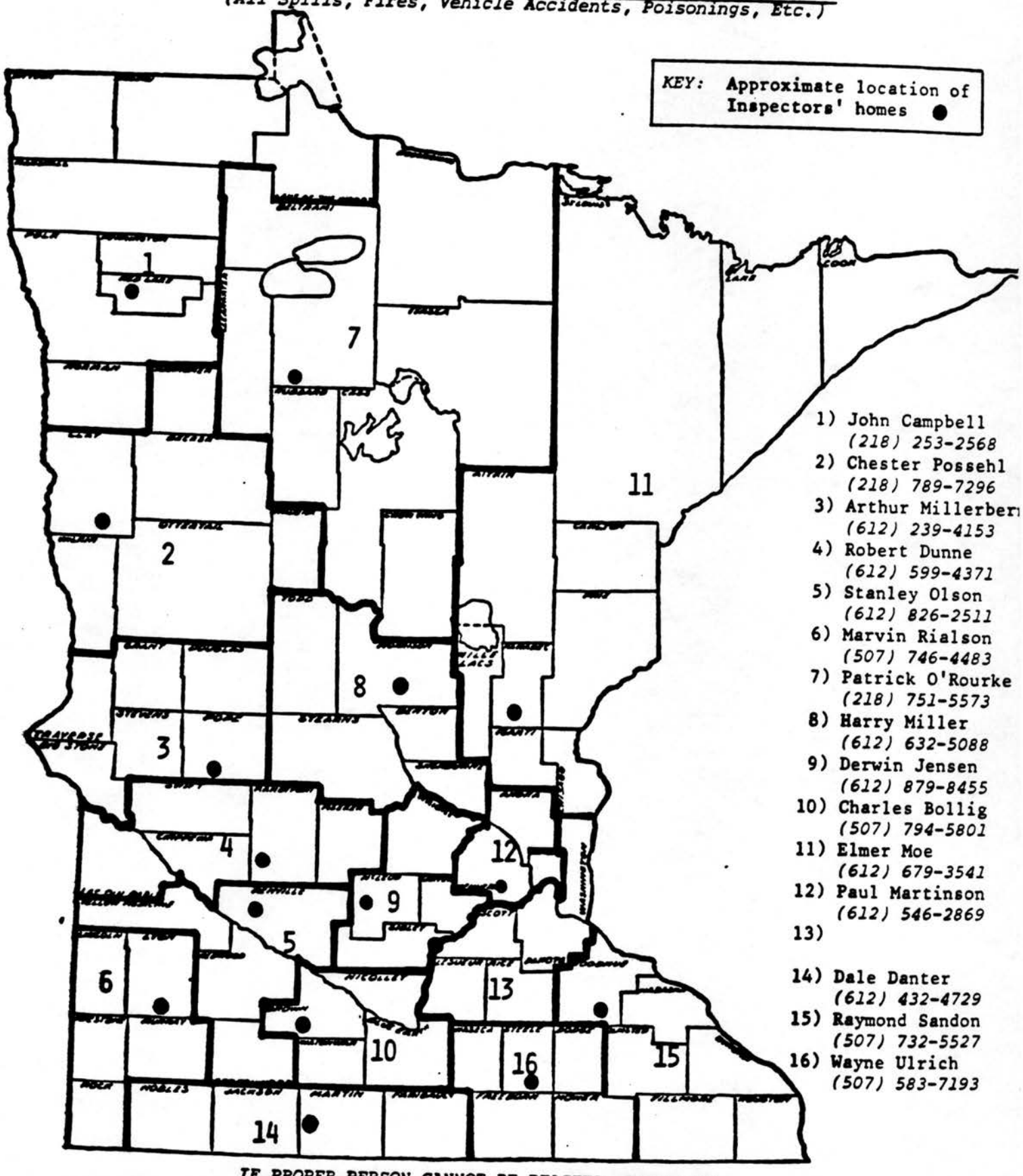
Department of Natural Resources
2300 Silver Creek Road
Rochester, Minnesota 55901

North Star Network No.: 103-7340
Direct: (507) 285-7340

MINNESOTA DEPARTMENT OF AGRICULTURE
Agronomy Services Division
90 West Plato Boulevard
Saint Paul, Minnesota 55107

PERSONS TO CONTACT IN A FERTILIZER OR PESTICIDE EMERGENCY

(All Spills, Fires, Vehicle Accidents, Poisonings, Etc.)



1) John Campbell
(218) 253-2568
2) Chester Possehl
(218) 789-7296
3) Arthur Millerberg
(612) 239-4153
4) Robert Dunne
(612) 599-4371
5) Stanley Olson
(612) 826-2511
6) Marvin Rialson
(507) 746-4483
7) Patrick O'Rourke
(218) 751-5573
8) Harry Miller
(612) 632-5088
9) Derwin Jensen
(612) 879-8455
10) Charles Bollig
(507) 794-5801
11) Elmer Moe
(612) 679-3541
12) Paul Martinson
(612) 546-2869
13)
14) Dale Danter
(612) 432-4729
15) Raymond Sandon
(507) 732-5527
16) Wayne Ulrich
(507) 583-7193

IF PROPER PERSON CANNOT BE REACHED, THEN CALL:

MINNESOTA DEPARTMENT OF AGRICULTURE.....(612) 296-6121 *(8:00 A.M. - 4:30 P.M.)*
David W. Dally.....(612) 297-2528 *Home:* (612) 459-6486
Larry P. Palmer

MINNESOTA DEPARTMENT OF AGRICULTURE
Agronomy Services Division
District Coordinators

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3)	Arthur Millerbernd	Route #3, Starbuck, MN 56381	(612) 239-4153
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11)	Elmer Moe	601 McLean Avenue, Mora, MN 55051	(612) 679-3541
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14)	Dale Danter	16388 Finch Way, Rosemount, MN 55068	(612) 432-4729
15)	Raymond Sandon	Route #2, Box 182, Zumbrota, MN 55992	(507) 732-5527
16)	Wayne Ulrich	Route #1, Blooming Prairie, MN 55917	(507) 583-7193

* * * * *

NOTE: See a doctor for medical assistance in the event of suspected human poisoning. The Hennepin County Poison Center can give immediate advice. Call 1-(612) 347-3141 for 24-hour/day service. Be able to furnish information from the label of the product suspected.

Primary contact for Spills or Incidents:

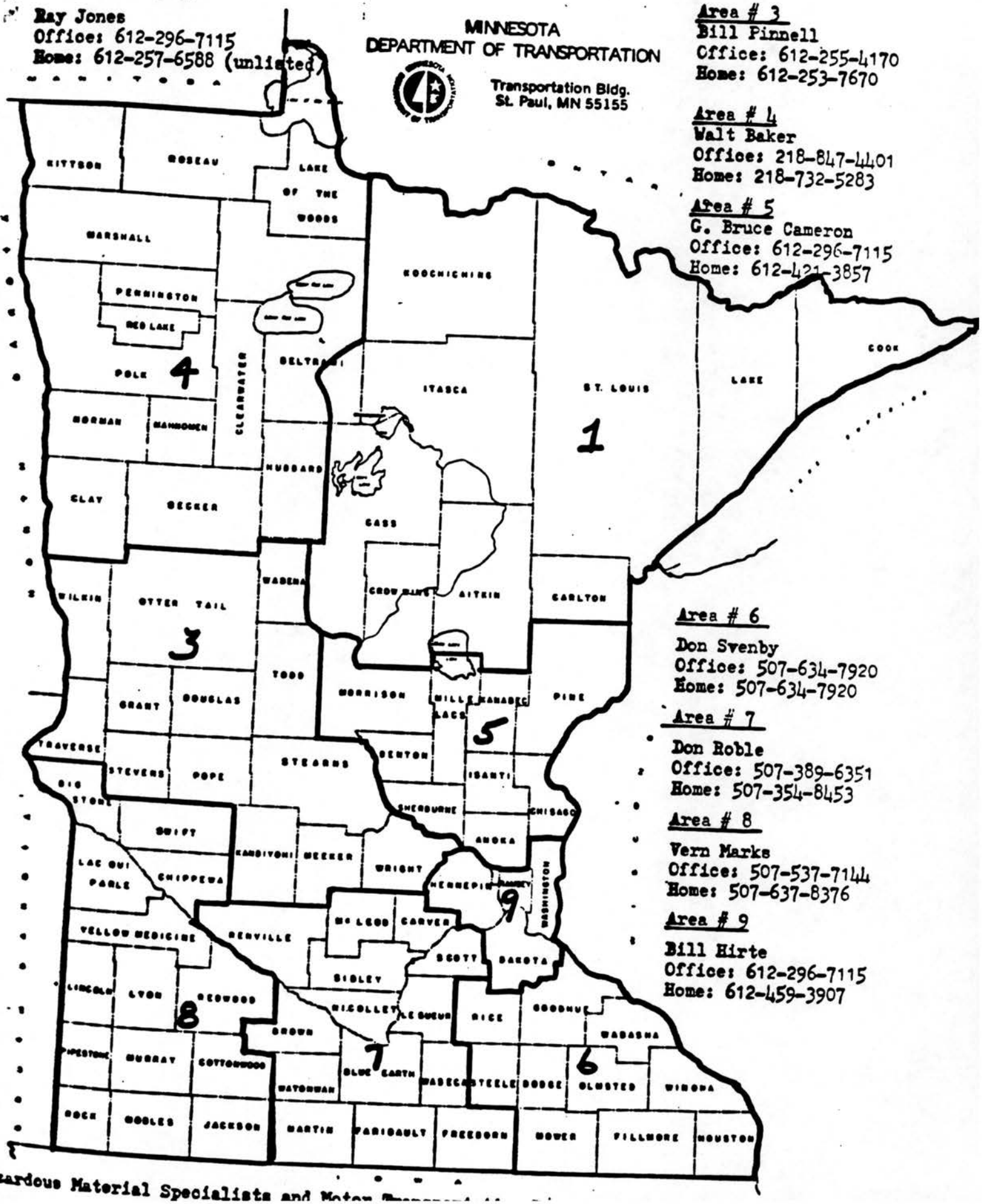
Pete Marcotte
Office: 612-296-7115
Home: 612-689-4768

Ray Jones
Office: 612-296-7115
Home: 612-257-6588 (unlisted)

STATE OF MINNESOTA

MINNESOTA DEPARTMENT OF TRANSPORTATION

Transportation Bldg.
St. Paul, MN 55155



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Hazardous Material Specialists and Motor

WPC 4 Regulation Relating to Storage or Keeping of Oil and Other Liquid Substances Capable of Polluting Waters of the State

(a) Definitions

(1) The definitions given in this section shall obtain for the purposes of this regulation except as otherwise specified or indicated by the context.

(2) "Substance" means any liquid material which might cause pollution of any waters of the state if mixed therewith.

(3) "Safeguard" means a facility or device or any system or combination thereof designed to prevent the escape or movement of any substance or solution thereof from the place of storage or keeping thereof under such conditions that pollution of any waters of the state might result therefrom.

(4) "Site" means any tract or parcel of land, including any constructed storage tank or artificial or natural basin or containment facility, except underground or buried tanks where any substance is stored or kept and which is so located that the escape or movement of such substance or a solution therefrom the site or into the underlying ground might result in pollution of any waters of the state.

(5) "Stored liquid material" means liquid material which is within a container or containment device located within the state other than a mobile type unit while in transit, used for transporting said material from one location to another.

(b) Prohibition of Storage or Keeping Substances Without Safeguards. No substance shall be stored, kept, or allowed to remain in or upon any site without reasonable safeguards adequate to prevent the escape or movement of the substance or a solution thereof from the site under any conditions of failure of the storage facility whereby pollution of any waters of the state might result therefrom. It shall be the duty of every owner of such stored substances, or other person responsible therefor, to obtain from the Water Pollution Control Commission a permit for the use of the site for the storage of liquid substances as provided in Section d or Section e.

(c) Safeguards. Unless otherwise prescribed by a permit issued under Section d or Section e as hereinafter provided, every safeguard shall comply with the requirements of this section, and shall consist of the following features.

(1) A continuous dike or wall entirely surrounding the site of such dimensions and construction that the emergency storage volume thereby created will be equal to not less than the total capacity of the largest storage tank or other container located within the area enclosed by the dike and will hold securely all of the aforesaid tank contents or any solution thereof in case of any failure of the container and the escape or movement of the substance or solution from its container or place of storage or keeping;

(2) A reasonably impervious bottom under the entire site and enclosure of such construction or composition either natural or artificial as to prevent in case of any failure of the container the seepage, percolation, or other movement of any substance stored or kept on the site or within the enclosure or any solution thereof into the underlying ground in such quantity that substantial pollution of the waters of the state in the vicinity might reasonably be expected to result therefrom under conditions prevailing at the site.

(3) Any alternative method of adequate safeguards submitted by owners of stored liquid substances may be reviewed by the Water Pollution Control Commission. Upon finding that any such alternative safeguards are satisfactory and that they will reasonably protect any waters of the State against pollution by the stored liquid, the Commission may approve the use of said alternate safeguards in lieu of the above standards and may thereafter issue a permit in accordance with Section d or Section e hereunder.

(d) Permits — Issuance on Application. On application for a permit by the owner or other person responsible for the keeping or storage of any substance on any site the Water Pollution Control Commission may require plans showing the features and method of operation of existing or proposed safeguards in accordance with these regulations. Such plans must be accompanied by a certification as to the adequacy of such safeguards. The Commission may thereafter issue a permit therefor upon such conditions as it shall prescribe to prevent pollution of any waters of the State by such substance. Such permit shall be subject to modification or revocation by the Commission in like manner as provided by law for permits for the installation or operation of disposal systems or parts thereof.

(1) Before the issuance, denial, revocation or modification of a permit by the Commission any person whose vested rights may be adversely affected thereby shall, upon request therefor, be entitled to a hearing before the Commission for the purpose of presenting evidence thereat. Written notice of the hearing stating the time and place thereof shall be given by the Commission to any person known by it to be directly affected by such action of the Commission either personally or by registered mail not less than 30 days before the date of the hearing.

(e) Flammable Liquids. Notwithstanding the provisions of Section d, of these regulations, a permit may be issued to owners of a flammable liquid storage facility upon certification by the Minnesota State Fire Marshal that the requirements of the Minnesota State Fire Marshal's flammable liquids code as amended and Section b of these regulations, have been complied with and are currently being fulfilled.

(f) Inadequate Safeguards. In case the Commission shall find that any substance is stored or kept on any site without a safeguard, or that any existing safeguard is inadequate, it may by order require the owner or other responsible person to immediately remove the substance from the site and to refrain from further storage or keeping of any substance therein unless and until an adequate safeguard is provided as hereinbefore prescribed.

(g) Notice Concerning Loss. It shall be the duty of the owner of a liquid storage facility or other responsible person in charge thereof to notify the Water Pollution Control Commission at its office in the Minnesota Department of Health Building at the University Campus, Minneapolis, of any loss of stored liquids either by accident or otherwise when such loss involves a liquid substance which would be likely to enter any waters of the state. Said notice shall be by telephone or other comparable means and shall be made immediately upon discovery of the loss. The notification shall include the location and nature of the loss and other pertinent information as may be available at the time.

(h) **Violations.** Violation of any provision of this regulation shall be punishable as provided by law.

(i) **Application.** This regulation shall not apply to the disposal of sewage, industrial waste, or other wastes under permits issued by the Commission as provided by law.

Adopted by Water Pollution Control Commission, June 26, 1964
Filed Secretary of State, July 9, 1964
Approved Commissioner of Administration, July 10, 1964

ATTACHMENT D

ATTACHMENT E

NOV 2 0 1991

POLLUTION CONTROL AGENCY

DRAFT

6 MCAR 4.8004 Rules Relating to Storage of Liquid Substances Capable of Polluting Waters of the State.

A. Purpose. This rule is adopted and promulgated by the agency to implement the provisions of Minn. Stat. ch. 115, as amended, by the establishment of procedures relating to the storage of liquid substances capable of polluting waters of the state.

B. Definitions. The terms "pollution of water", "water pollution", "pollute the water", "waters of the state", "person", "agency", as well as any other pertinent terms for which definitions are given in Minn. Stat. ch. 115, as amended, shall have the meanings ascribed to them.

For the purposes of this rule the terms defined have the meanings given them.

1. "Barrel" means any storage container having a liquid capacity equal to or less than 55 gallons and not installed in a fixed location.

2. "Director" means the executive director and chief executive officer of the agency.

3. "Portable tank" means any storage container having a liquid capacity greater than 55 gallons and not installed in a fixed location. This definition does not include transformers.

4. "Safeguard" means a facility, device, system, or inspection method designed to prevent the escape or movement of a substance from its storage container or containment device under such conditions that pollution of a water of the state may result.

5. "Site" means any tract or parcel of land where a substance is stored in a storage container or containment device and which is so located that the escape or movement of the substance may result in pollution of a water of the state.

6. "Stored substance" means a liquid material which is within a storage container or containment device located within the state.

7. "Substance" means a liquid material which may cause pollution of a water of the state.

C. Prohibition of storage of a substance without safeguards

1. No substance shall be stored, kept, or allowed to remain in or upon any site without reasonable safeguards adequate to prevent the escape or movement of the substance from the site under any condition of failure of the storage container or containment device where pollution of a water of the state may result.

2. Where storage of a substance is provided in an above ground storage container or containment device, it shall be the duty of the owner of the storage container or containment device or other responsible person to obtain from the agency a permit, as provided in E, for the use of the site for the storage of the substance.

D. Safeguards. Unless otherwise prescribed by a permit issued under E, safeguards must comply with the requirements of this section.

1. The safeguards for an above ground storage container or containment device must consist of the following features:

a. Except sites with barrels containing any substance, a continuous dike entirely surrounding the site must be provided. The emergency storage volume created must be equal to not less than the total capacity of the largest storage container or containment device located within the site enclosed by the dike plus one additional foot of freeboard. Earthen dikes must have slopes no steeper than three horizontal to one vertical to limit erosion and insure structural stability. Non-reinforced concrete blocks are not acceptable as a dike. Vegetation or riprap on the sides of an earthen dike must be provided to prevent erosion. For sites with barrels containing any substance, a curb must be provided in case of the escape or movement of a substance from its barrel.

b. The bottom under the entire site and the inside slope of the dike must be of such construction or composition as to prevent, in case of any failure of the storage container or containment device, the seepage, percolation, or other movement of a stored substance into the underlying ground. The seepage rate from the bottom and the inside slope of the dike must not exceed 0.125 inches per day for the substance stored. Testing of the permeability must be conducted upon placement of the seal in accordance with the terms and conditions of the permit issued under E.

c. Facilities must be provided to remove uncontaminated water due to precipitation. Any drain must have a manually operated valve. There must be no open drains in the diked area. The bottom under the site must be constructed so that water or the substance does not accumulate at the base of the tank.

d. Safeguards must be provided to prevent the loss of any stored substance from the site in the event of a flood if the site is located in a 100 year flood plain area.

e. When providing safeguards for an existing storage container or containment device, the storage container or containment device may be emptied, cleaned, and inspected by qualified personnel by methods approved by the director in lieu of sealing directly under the storage container or containment

device, as required in b. This testing must be performed once every five years and will be a condition of the permit issued under E. The initial test shall be performed before issuance or reissuance of the permit. The director must be notified within one week of any storage container or containment device failing the prescribed testing. The bottom of the site, except that area directly under the storage container or containment device, must be sealed in accordance with b.

f. Any alternate method of adequate safeguards may be reviewed by the director. Upon finding that any such alternate method of safeguards are satisfactory and that they will reasonably protect the waters the of the state against pollution by the stored substance, the director may approve the use of said alternate method of safeguard and may issue a permit in accordance with E.

2. The safeguards for a below ground storage container and appurtenances must consist of the following:

a. Installation of all new or replacement steel storage containers must be protected from corrosion by the use of one or more of the following methods: (1) use of protective coatings or wrappings; (2) cathodic protection; or (3) corrosion resistant materials of construction.

b. Below ground storage containers, except those of fiberglass construction, and all tank appurtenances which have been

installed at the existing site for 15 years or longer must be tested by hydrostatic methods approved by the director. The initial test must be performed within three years of promulgation of this rule and shall be performed at least once every three years thereafter. Storage containers that cannot be tested by hydrostatic methods approved by the director must be tested by alternate methods approved by the director. The director must be notified within one week of any tank or appurtenance failing the prescribed testing.

c. An inventory must be kept for each storage container at a site. Inventories must be based upon the actual daily measurement of the storage container liquid level and weekly use of a water detection device. The written record of such inventories must include a computation of gain or loss for the period. Inventory records for the previous year must be kept and made available for review upon request of the director. Records of all maintenance performed on the storage container and appurtenances must be kept for a period of three years. The owner of the storage container or other responsible person shall be responsible for immediately notifying the director of any confirmed loss or gain. Upon discovery of a confirmed loss or gain or at any time that any underground storage container or appurtenances are found to be leaking or are reasonably believed to be leaking, it shall be the duty

of the owner of the storage container or other responsible person to have the storage container and appurtenances hydrostatically tested. The results of this test shall be reported to the director within 48 hours of the completion of the test.

E. Permits

1. Above ground storage. Upon application for a permit by the owner of the storage container or other responsible person, the applicant shall submit to the director plans showing the features and methods of operation of existing and proposed safeguards. Such plans must be accompanied by a certification as to the adequacy of such safeguards. The agency may thereafter issue a permit prescribing terms and conditions to prevent pollution of a water of the state by the stored substance. The permit shall be issued for a period of ten years. The permit shall be subject to modifications or revocations by the agency.

Permits issued prior to the promulgation of this revised rule expire according to the following schedule:

a. Permits issued from 1965 through the end of 1973 expire one year from effective date of this rule;

b. Permits issued from 1974 through May, 1975 expire two years from the effective date of this rule;

c. Permits issued from June, 1975 through 1977 expire three years from the effective date of this rule;

d. Permits issued from 1978 through 1979 expire four years from the effective date of this rule;

e. Permits issued from 1980 through effective date of this rule expire five years from the effective date of this rule.

2. Below ground storage. No permit under this rule shall be required for below ground storage containers. This does not relieve the owner of the storage container or other responsible person from providing adequate safeguards.

F. Notice concerning loss. It shall be the duty of any person to notify the agency of a loss of a stored substance either by accident or otherwise. Said notice must be by telephone or other comparable means and must be made immediately upon discovery of the loss. Written confirmation of the loss must be submitted to the director by the owner of the storage container or other responsible person within five days after the discovery of the loss.

G. Inadequate safeguards. In case the agency shall find that any substance is stored on any site without a safeguard, or that any existing safeguard is inadequate, it may by written notification from the director require the owner of the storage container or other responsible person to immediately remove the substance from

the site and to refrain from further storage of any substance unless and until adequate safeguards are provided.

H. Exemptions. This rule shall not apply to the following:

1. Site storing a hazardous waste as defined in Minnesota Hazardous Waste Rule 6 MCAR 4.9217(A.5).

2. Storage container or containment device inside a building that has a volume of less than 5000 gallons.

3. Portable tank that has a volume of less than 600 gallons.

4. Barrels stored inside a building.

5. Less than 200 barrels stored on a site outside of a building.

6. Fuel oil tank with less than 600 gallon capacity.

7. Farm fuel tank.

8. Anhydrous ammonia tanks.

9. Liquid fertilizer tank that requires a permit issued by the Department of Agriculture or portable nurse tank. Existing liquid fertilizer tank that does not require a Department of Agriculture permit will require a permit issued in accordance with this rule.

10. Liquid wastes generated by the raising of animals, including animal manures.

11. Wastes discharged pursuant to an NPDES Permit or State Disposal System Permit.

12. Sludge generated from a municipal wastewater treatment facility.

13. Septic tank system.

14. Transformer in service.

15. Uncontaminated water storage tank.

16. A tank truck or railroad car.

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

IN THE MATTER OF THE PROPOSED AMENDMENTS TO THE RULES OF THE DEPARTMENT OF AGRICULTURE GOVERNING FERTILIZER LABELS AND LABELING REQUIREMENTS (Agr 319-323)	)))	STATEMENT OF NEED AND REASONABLENESS

I. INTRODUCTION

The subject of this rulemaking is the proposed amendments to rules of the Minnesota Department of Agriculture governing fertilizer labels and labeling requirements. The amendments to these rules are proposed for adoption pursuant to Minnesota Statutes section 17.725, Subdivision 1, which authorizes the Department to establish rules for labels and labeling requirements for fertilizers registered in Minnesota.

Rulemaking on the proposed amendments to the rules was authorized by the Department on October 28, 1982. The commissioner of the Minnesota Department of Agriculture determined that the proposed amendments to these rules would be noncontroversial in nature due to consultations with representatives of the fertilizer industry, and due to the fact that the Department received no responses to its notice to solicit outside opinion in this matter. However, due to provisions of Minnesota Statutes section 17.725, subd. 1, a public hearing will be held regarding the proposed amendments to these rules.

The discussion provided in this statement is divided into the following parts:

Part II. General overview

Part III. Need for and reasonableness of the proposed amendments to the rules

Part IV. Attachments

II. GENERAL OVERVIEW

A. The Need for Fertilizer Labels and Labeling Requirements:

In order to understand the need for and reasonableness of the proposed amendments to these rules, it will be useful to understand the context in which the amendments are proposed. Currently, there is no federal law, and there are no federal regulations in the fertilizer industry. However, the Association of American Plant Food Control Officials (AAPFCO) has, since 1946, worked to develop model laws and regulations for adoption at the state level. The AAPFCO is composed of state officials responsible for regulating fertilizers and fertilizer materials in the 50 states. Industry members have always been participants in these AAPFCO meetings, although they are not voting members, and they have made significant contributions to the discussions of model laws and regulations. Thus, the industry is familiar with the labeling requirements herein and has accepted recommendations made by AAPFCO since 1946. Because of this, these proposed amendments to the rules codify practices already used within the fertilizer industry and would not result in a new economic burden on the industry. Similar guidelines are used in most of the other 49 states in their fertilizer labeling and review activities. The amendments as proposed are consistent with the model regulations developed by AAPFCO, a copy of which is included in this statement of need and reasonableness as Attachment A.

The first Minnesota law requiring the labeling and registration of all commercial fertilizers with the Department was passed in 1915. The registration and labeling of specialty fertilizers was first required in 1949. In 1968, the Department adopted rules governing

soil conditioners and trace minerals in fertilizers. Since the early 1970's, there have been many technological advances resulting in numerous new fertilizer products such as "slow release" fertilizers and fish emulsions. The Department has regulatory authority over the sale of these products, and has registered them, but has not had adequate enforcement standards because the 1968 rules do not have specific labelling requirements for the more recent fertilizer products. The administrative experience of the Department demonstrates the need to adopt additional standards for the labeling of all fertilizer products, including the new products, because of the difficulty of enforcing state law. Thus, almost all of the material in these proposed amendments to the rules is new material.

Beyond the issue of enforcement, this rule is necessary primarily to provide consumer protection through truth in labeling of the fertilizers sold or distributed in Minnesota. The purchase of fertilizer is a major farm expense in Minnesota, totalling $625 million in 1981. Because fertilizer purchases impact so greatly on farm income and production, it is necessary that the fertilizers be properly labeled. At the same time, it is reasonable to make the amendments to the rules consistent with AAPFCO's model regulations since many of the fertilizers are distributed in all 50 states. Uniformity in labeling among the states reduces the burden for those registering fertilizers in several states from having to meet different labeling requirements for each state. Thus, the adoption of these model regulations in Minnesota would facilitate inter-state trade.

The proposed requirements for labels and the labeling of fertilizers will pertain to all fertilizers sold or distributed in Minnesota. At the present time, the proposed amendments will affect approximately 1,000 specialty and small packaged fertilizer products that are registered with the Department by approximately 130 companies, located both in Minnesota and throughout the world. These proposed amendments to the rules will also affect the labels and labeling requirements for approximately 850 blenders, manufacturers and distributors who also distribute commercial fertilizers in Minnesota.

By the promulgation of these amendments to these rules, the Department wishes to clarify the requirements for fertilizer labels and labeling which apply to all commercial fertilizers sold in Minnesota, in accordance with Minnesota Statutes section 17.711 to 17.729.

B. Format of the Proposed Amendments to the Rules:

The proposed amendments to the rules are set forth in the following manner: Authority and purpose; definitions; label information requirements; exception to label information requirements; location of label information; bulk fertilizers; slowly released plant nutrients; fish emulsions; additional plant nutrients permitted; labeling and labels; warning statements; enforcement; and repealer.

In this statement, for the sake of brevity, the content of the proposed amendments to the rules has not been repeated, but the numbers of the parts of the rule have been noted for reference.

III. NEED FOR AND REASONABLENESS OF THE PROPOSED AMENDMENTS TO THE RULES

The need for and reasonableness of each proposed amendment to the rules follows.

3 MCAR S 1.0327 A. Authority and Purpose

This part of the rule is all new material and is necessary and reasonable to clarify for readers and users the purpose of this rule governing fertilizer labels and labeling and the authority by which the commissioner proposes the amendments to the rules.

3 MCAR S 1.0327 B. Definitions

While the present rule Agr 319 contains definitions, the commissioner proposes to repeal those definitions since they are not precise enough, given the present level of scientific advancement. Thus, the definitions proposed in this part are all new material. The terms are necessary to clarify meanings for readers and users of the rules, and are reasonable terms because they are terms familiar in the fertilizer industry. Some of the definitions were incorporated from Minnesota Statutes section 17.713, while the following definitions were included and developed specifically for this rule.

The definition of "department" is necessary to identify the state agency charged with regulating the labels and labeling requirements of commercial fertilizer. The definition of "fertilizer" is necessary because it reflects the fact that all fertilizers are subject to the provisions of this rule. The definition of "plant nutrient" is necessary because it clarifies the interchangeable use of the term with "plant food" which is defined in Minnesota Statutes section 17.712, subd. 15 b.

3 MCAR S 1.0327 C. Label Information Requirements

This part of the rule is all new material and is necessary for two reasons. The first is to inform persons blending, manufacturing, and distributing fertilizers in Minnesota of the required information, format, and order to be placed on the labels affixed to fertilizer bags or other containers. The second reason is to assure that consumers will be able to determine product content before they purchase the fertilizer. It is reasonable that consumers be assured that they are getting the fertilizer they are purchasing, and it is also reasonable for the industry because the content, format, and order of the label information is consistent with AAPFCO standards, would be acceptable in a number of states, and thus would not be an undue economic hardship on the industry.

3 MCAR S 1.0327 D. Exception to Label Information Requirements

This part of the rule is all new material and is necessary to clarify exceptions to the label information requirements stated in C. The first section of this part of the rule, regarding the percentage of a plant

nutrient being zero, is a necessary exception because the commissioner cannot permit the guarantee of a plant nutrient which is not contained in the product. It is reasonable to leave a zero percentage nutrient out of the label so that consumers will not be confused by its being listed.

The second section of this part of the rule is necessary to identify the fertilizers which must have the chemical forms of nitrogen listed. If the nitrogen contained in a fertilizer is not a fish emulsion, organic or slowly released, just the total amount of nitrogen may be listed on the label, since frequently the nitrogen is all of one type in fertilizers other than these. If the nitrogens are not organic or slowly released, there is no need to document any claims for them on the product label since no elaborate claims are made. If claims are made, however, such as "slow release", they must be documented. That is the requirement of this section.

3 MCAR S 1.0327 E. Location of Label Information

This part of this rule is new material, and is necessary for two reasons. The first is that this part identifies the area on the package or container where the label information must be placed which is required under Minnesota Statutes section 17.716, subd. 1, and it is necessary for consumers to be able to spot the information easily on the package. It is a reasonable requirement since it is consistent with AAPFCO recommendations and as such facilitates labeling for inter-state trade. It will also have little economic impact on industry since their practices are already consistent with this requirement.

3 MCAR S 1.0327 F. Bulk Fertilizers

This part of the rule regarding the information to accompany bulk fertilizers upon delivery is all new material and is necessary to inform purchasers of the product they are receiving. It is also a requirement of Minnesota Statutes section 17.716, subd. 3. It is reasonable that consumers should have adequate knowledge of what they are purchasing. This requirement is in lieu of label information requirements for packaged products.

3 MCAR S 1.0327 G. Slowly Released Plant Nutrients

This part of the rule is quite extensive, containing all new material. The technology for "slowly released" plant nutrients is relatively new within the last few years. Thus it is important and necessary for the commissioner to identify which fertilizer products claiming "slow release" properties are making legitimate claims by adopting standards these products must meet before they can be guaranteed by the labeler and registered for sale or distribution in the state. The standards and labeling proposed for these products are reasonable because they are standards and labels consistent with those prepared by AAPFCO for these fertilizers.

The first three sections of this part of the rule contain general statements about what the commissioner will accept as descriptive of fertilizers making slow release claims. The fourth section of this part of the rule contains a clarification of what is acceptable as organic nitrogen and contains an example for the required label and labeling of such a product. The fifth section of this part of the rule contains a lower level threshold for the claim of "slow release", i.e., 15 percent of the guarantee for the total of any of the primary nutrients of nitrogen, available phosphoric acid or soluble potash. Amounts less that 15 percent of any of these nutrients would not have slow release properties.

The sixth section of this part of the rule contains reference to the tests of physical and chemical properties of fertilizers claiming slow release or organic properties which the Department will use before permitting the guarantee of such products to be registered for sale or distribution in Minnesota. The specific tests appear in Attachment D. The seventh and eighth sections of this part of the rule give examples of acceptable labels and labeling both for nitrogen-only slow release fertilizers and for fertilizers which contain more than one slow release plant nutrient.

3 MCAR S 1.0327 H. Fish Emulsions

This part of the rule regarding the definition and labeling of fish emulsion fertilizers is all new material. It is necessary for the commissioner to provide standards for the identification of these products because they are new fertilizer products which have gained widespread use only in the last two or three years. These products are different from fertilizers whose labeling requirements were covered in C. or exempted in D. because they are the only fertilizer products currently marketed which contain "other water soluble nitrogens" and these require a specific labeling standard different from other fertilizers.

It is reasonable to label these products so that consumers know what they are. While AAPFCO has not yet fully adopted these standards, a subcommittee of the group has completed a report, found in Attachment C, recommending the acceptance of this format and restrictions. The fish emulsion industry has agreed to label the products uniformly with this example and has done so for the last two years. Thus it is reasonable to require industry to continue doing so for consumer protection purposes.

3 MCAR S 1.0327 I. Additional Plant Nutrients Permitted

Much of the material in this part of this rule was contained in the current rule of the Department, Agr 322. The first section of this part of the rule contains amendments which are only amendments of language and form made by the Office of the Revisor of Statutes. The third section of this part of the rule is also only a clarification of language and form made by the Office of the Revisor of Statutes and appears in current rule of the Department, Agr 322 (a) (3).

The second section of this part of the rule, however, does contain all new material. It is necessary to provide standards for the manner in which additional plant nutrients of genuine value for agricultural crops should be labeled, and it is a reasonable provision because the requirements are consistent with the most usual labeling requirements for fertilizers as contained in C.

3 MCAR S 1.0327 J. Labeling and Labels

This part of this rule contains an amendment to the present rule Agr 322 (b). It is necessary to add the requirement that "labeling" materials be submitted to the commissioner at the time of request for registration in order to incorporate 1982 statutory changes as stated in Minnesota Statutes section 17.714, subd. 3 (b). This is a reasonable requirement so that the Department can verify any claims made by fertilizer companies on promotional materials which may accompany the fertilizer and can assure that the information provided on the label on the package itself is consistent with claims made in promotional brochures or other materials. This is a reasonable requirement for consumer protection in order that consumers will not be confused by conflicting information between labels and promotional statements.

3 MCAR S 1.0327 K. Warning Statements

The material in this part of this rule is all old material, amended only by clarifications of language and form made by the Office of the Revisor of Statutes.

3 MCAR S 1.0327 L. Enforcement

This part of this rule contains all new material and is necessary to inform persons labeling fertilizers for registration and subsequent sale or distribution in Minnesota of the commissioner's intent to act and procedures for the commissioner's action in instances where provisions of this rule are not met. Further, it is necessary to inform persons labeling fertilizers of their rights should they fail to meet the requirements of this rule.

This section is also reasonable since persons labeling fertilizers are entitled to know the consequences of failing to meet the provisions of the rule and are also entitled to know that the commissioner will afford opportunitites for hearings before canceling registrations when provisions of this rule are not met.

Repealers

Rules Agr 319, 320, and 321 are proposed for repeal because the scientific understanding of the types of products described by these rules has advanced to the point where the provisions in these rules are totally inadequate. Legislative changes relating to soil amendments and

plant amendments were made in 1981 (Laws of Minnesota, 1981, chapter 214), and new rules are being developed and proposed to more adequately regulate the products covered in these current rules. It is unreasonable to retain old rules when new governing statutes exist.

Rule Agr 323 is proposed for repeal because the appeals process is governed by Minnesota Statutes section 17.728.

IV. ATTACHMENTS

The following attachments are referred to in this statement and are appended. The first three attachments are materials developed by the Association of American Plant Food Control Officials (AAPFCO) and the fourth attachment is from the Association of Official Analytical Chemists.

Attachment A - "Model Rules and Regulations", AAPFCO Official Publication No. 35, 1982, pp. 28-30.

Attachment B - "Statements of Uniform Interpretation and Policy", AAPFCO Official Publication No. 35, 1982, pp. 35-36.

Attachment C - "Committee and Investigator Reports: Labeling Committee", AAPFCO Official Publication No. 32, 1979, pp. 133-137.

Attachment D - Excerpt from "Official Methods of Analysis of the Association of Official Analytical Chemists", William Horwitz, Editor, 13th edition, 1980, pp. 16-17.

ATTACHMENT A

No. 35 1982

OFFICIAL PUBLICATION

Association of American Plant Food Control Officials



Published by Association of American Plant Food Control Officials, Inc.
West Lafayette, Indiana

Copies may be purchased from

Howard P. Moore, Treasurer
Specialist in Charge
Feed and Fertilizer Section
Department of Agriculture
Reynoldsburg, Ohio 43068

sions of this Act are hereby repealed.

Section 23. Effective Date
This Act shall take effect and be in force from and after the first day of _____.

RULES AND REGULATIONS

Under the Uniform Fertilizer Bill by the _____ of the State of _____ Pursuant to due publication and notice of opportunity for a public hearing, the _____ has adopted the following regulations.

1. Plant Nutrients in Addition to Nitrogen, Phosphorus and Potassium.

Other plant nutrients when mentioned in any form or manner shall be registered and shall be guaranteed. Guarantees shall be made on the elemental basis. Sources of the elements guaranteed and proof of availability shall be provided the _____ upon request. The minimum percentages which will be accepted for registration are as follows:

Element	%
Calcium (Ca)	1.0000
Magnesium (Mg)	0.5000
Sulfur (S)	1.0000
Boron (B)	0.0200
Chlorine (Cl)	0.1000
Cobalt (Co)	0.0005
Copper (Cu)	0.0500
Iron (Fe)	0.1000
Manganese (Mn)	0.0500
Molybdenum (Mo)	0.0005
Sodium (Na)	0.1000
Zinc (Zn)	0.0500

Guarantees or claims for the above listed plant nutrients are the only ones which will be accepted. Proposed labels and directions for the use of the fertilizer shall be furnished with the application for registration upon request. Any of the above listed elements which are guaranteed shall appear in the order listed immediately following guarantees for the primary nutrients of nitrogen, phosphorus and potassium.

A warning or caution statement is required on the label for any product which contains 0.10% or more of boron in water soluble form. This statement shall carry the word "WARNING" or "CAUTION" conspicuously displayed, shall state the crop(s) for which the fertilizer is to be used, and state that the use of the fertilizer on any other than those recommended may result in serious injury to the crop(s).

Products containing 0.001% or more of molybdenum also require a warning statement on the label. This shall include the word "WARNING" or "CAUTION" and the statement that the application of fertilizers containing molybdenum may result in forage crops containing levels of molybdenum which are toxic to ruminant animals.

Examples of Warning or Caution Statements:

Boron:

1. Directions: Apply this fertilizer at a maximum rate of 350 pounds per acre for Alfalfa or Red Clover seed production. CAUTION: Do not use on other crops. The Boron may cause injury to them.
2. CAUTION: Apply this fertilizer at a maximum rate of 700 pounds per acre for Alfalfa or Red Clover seed production. Do not use on other crops; the boron may cause serious injury to them.
3. WARNING: This fertilizer carries added borax and is intended for use only on Alfalfa. Its use on any other crops or under conditions other than those recommended may result in serious injury to the crops.

Molybdenum:

1. CAUTION: This fertilizer is to be used only on soil which responds to molybdenum. Crops high in molybdenum are toxic to grazing animals (ruminants).

2. Specialty Fertilizer Labels.

The following information, if not appearing on the face or display side in a readable and conspicuous form, shall occupy at least the upper-third of a side of the container.

(a) Net Weight
(b) Brand and Grade
(c) Guaranteed Analysis:*
Total Nitrogen (N)**....._____%
_____% Ammoniacal Nitrogen
_____% Nitrate Nitrogen
_____% Water Insoluble Nitrogen
_____% *(Other recognized and determinable forms of N)*
Available Phosphoric Acid (P_2O_5)....._____%
Soluble Potash (K_2O)....._____%
*(Other nutrients, elemental basis)****....._____%
(d) Sources of nutrients, when shown on the label, shall be listed below the completed guaranteed analysis statement.
(e) Name and address of registrant.

*If any percentage is zero (0), the nutrient shall be omitted from the statement.
**If chemical forms of N are claimed or required, the form shall be shown and the percentages of the individual forms shall add up to the total nitrogen percentage.
***As prescribed by regulations.

3. Slowly Released Plant Nutrients.

(a) No fertilizer label shall bear a statement that connotes or implies that certain plant nutrients contained in a fertilizer are released slowly over a period of time, unless the nutrient or nutrients are identified and guaranteed.
(b) Types of product with slow release properties recognized are (1) water insoluble (N products only), such as natural organics, urea formaldehyde, IBDU, oxamide, etc., (2) coated slow release such as sulfur coated urea and other encapsulated soluble fertilizers, and (3) occluded slowly released, where fertilizers or fertilizer materials are mixed with waxes, resins, or other inert materials and formed into particles. The terms, "water insoluble, coated slow release, and occluded slow release" are accepted as descriptive of these products, respectively, provided the manufacturer can show a testing program substantiating the claim (test-

ing under guidance of Experiment Station personnel or a recognized reputable researcher acceptable to the _____). A laboratory procedure, acceptable to the _____ for evaluating the release characteristics of the product(s) must also be provided by the manufacturer.

(c) To supplement (b) when the nitrogen is organic, it should be established that if a label states the amount of organic nitrogen present in a phrase, such as "nitrogen in organic form equivalent to X% N", then the water insoluble nitrogen guarantee must not be less than 60% of the nitrogen so designated. For example: If the total nitrogen guarantee for a fertilizer is 10% and the label states, "Nitrogen in organic form equivalent to 2.5% N" then the WIN guarantee must not be less than 1.5% (2.5% x 0.6 = 1.5%).

(d) When a slowly released nutrient is less than 15% of the guarantee for either total nitrogen (N), available phosphoric acid (P_2O_5), or soluble potash (K_2O), as appropriate, the label shall bear no reference to such designations.

(e) Until more appropriate methods are developed, AOAC method 2.074 (13th Edition), or as it shall be designated in subsequent editions, is to be used to confirm the coated slow release and occluded slow release nutrients and others whose slow release characteristics depend on particle size. AOAC method 2.072 (13th Edition) shall be used to determine the water insoluble nitrogen of organic materials.

ATTACHMENT B

No. 35 1982

OFFICIAL PUBLICATION

Association of American Plant Food Control Officials



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STATEMENTS OF UNIFORM INTERPRETATION AND POLICY

1. Grade - The grade of a fertilizer should be included with its brand name, and so used by the manufacturer on sacks and in printing literature and by the control official in his reports and publications. No numeral shall be used in the brand name or grade of a commercial fertilizer except those referring to nitrogen, available phosphoric acid and potash. (Official 1965.)
2. Nutrient Guarantee - All fertilizer nutrients, with the exception of phosphoric acid (P_2O_5) and potash (K_2O) if guaranteed, shall be stated in terms of the elements. (Official 1953.)
3. Name of Fertilizer Material - When the name of a fertilizer material is used as a part of the brand name of a mixed fertilizer, as for example, blood, bone or fish, the nitrogen or phosphoric acid shall be derived from or supplied entirely by the material named. When the name of a fertilizer material is used as a brand or as part of a brand and the nitrogen or phosphoric acid is not supplied by the material named the word "brand" shall follow the name of the materials. Example: "Fish Brand Fertilizer". (Official 1953.)
4. Phosphoric Acid and Potash - As the terms phosphoric acid and potash are used universally in guaranteeing and in reporting the analysis of fertilizers it is recommended that the same terms also be used in reporting and discussing the results of analyses of related materials. (Official 1953.)
5. Net Weights - The weights appearing on packages of fertilizers, agricultural lime, and liming materials shall always mean net weights. (Official 1953.)
6. Mixtures of Ammonium Nitrate and Limestone or Dolomite - These shall not be designated as "ammonium calcium nitrate", "calcium ammonium nitrate" or similar names which imply the presence of either calcium nitrate or ammonium carbonate in such mixtures. (Official 1953.)
7. Activity of Water-insoluble Nitrogen in Mixed Fertilizers - The alkaline and neutral permanganate methods distinguish between the better and the poorer sources of water-insoluble nitrogen, and do not show the percentage availability of the materials. The available nitrogen of any product can be measured only after carefully conducted vegetation experiments.
   (a) The methods shall be used on mixed fertilizers containing water-insoluble nitrogen amounting to three-tenths (0.3%) of one percent or more of the weight of the material. If a total nitrogen exceeds the minimum guarantee and is accompanied by a low activity of the insoluble nitrogen, the overrun shall be taken into consideration in determining the classification of the water-insoluble nitrogen.
   (b) The water-insoluble nitrogen in mixed fertilizers showing an activity below fifty percent (50%) by the alkaline method and also below eighty percent (80%) by the neutral method shall be classed as inferior. This necessitates the use of both methods, also the provision as to over-run in (a), before classifying as inferior. (Official 1966.)
8. Fused and Noncrystalline Phosphate Products - These shall be marketed with an adequate statement concerning size of particles, in terms of percentages of the total product which pass through U. S. standard sieves of stated sizes. (Official 1958.)
9. Specialty Fertilizer Labels - Any product coming under the fertilizer law shall not carry labels to emphasize that dilutions will make so many gallons of fertilizer. Specific claims, such as "contents of this package will make .... gallons of fertilizer" should be prohibited. The labels shall not carry any extravagant and misleading advertising and claims. (Official 1958.)
10. Amount of Chlorine Permissible in Fertilizers in Which the Potash is Claimed to be Present in Form Other than Chloride - The chlorine in mixed fertilizers in which the potash is claimed in form other than chloride shall not exceed one-half of one percent (0.5%) more than five percent (5%) of the potash content found. (Calculate as follows: 0.05 times the percentage of potash found plus 0.5). (Official 1976.)

11. Labels for Liming Materials Mixtures - Artificial mixtures of two or more liming materials or of gypsum and liming materials shall include on the label a list of the ingredients used. (Official 1958.)
12. Sieve Numbers - Sieve numbers designate sieve openings conforming to specifications of the United States Standard Sieve Series. (Official 1958.)
13. Reporting Analyses - Reporting the analyses of official samples is an integral part of fertilizer control, and their usefulness to manufacturers and guarantors is largely dependent upon the time lapse between sample collection and reporting. Every effort should be expended toward reporting analyses within a reasonable period of time after sample collection. (Official 1976.)
14. Fertilizer Legislation - The Uniform Bill and Regulations are the result of considerable study and deliberation. Control officials and industry should keep each other advised of pending legislation and provide the necessary information to promote uniformity. (Official 1976.)
15. Sampling - The proper collection of sample is the foundation of a sound and equitable fertilizer program. AOAC has adopted official sampling procedures and apparatus, thus these should be used by all states. (Official 1976.)
16. Guarantees for Fertilizer Materials - Fertilizer materials containing only one plant food and recognized by their chemical names are required to list only a guarantee for the plant food contained therein. For example, the only guarantee required for ammonium nitrate would be "Total Nitrogen....33.5%". (Official 1976.)
17. "Coated Slow Release" or "Occluded Slow Release" Nutrients - When two or more nutrients in a fertilizer are coated, or occluded to obtain slow release properties, then the guarantees for those components may be shown as footnotes rather than as a component following each nutrient. For example,

Fertkote 10-15-20

Guaranteed Analysis

Total Nitrogen (N)*	10%
2.5% Ammoniacal nitrogen	
2.5% Nitrate nitrogen	
5.0% Urea nitrogen	
Available Phosphoric Acid (P_2O_5)*	15%
Soluble Potash (K_2O)*	20%
Sulfur (S)	14%

*The nitrogen, phosphorus and potassium materials in this product have been coated to provide 9.0% coated slow release nitrogen (N), 13% coated slow release available phosphoric acid (P_2O_5), and 18% coated slow release soluble potash (K_2O). (Official 1981.)

18. Sampling of On-Farm Bulk Storage - No sample obtained from on-farm bulk storage owned and/or controlled by the farmer-consumer shall be designated as "official" unless (1) the sample is taken in the presence of the farmer-consumer and the fertilizer registrant or their respective representatives; or (2) the sample is taken in the presence of the farmer-consumer or his representative, the fertilizer registrant having been informed and accepting responsibility for the quality of product sampled; or (3) the sample is taken in the presence of the farmer-consumer or his representative and he certifies by written affidavit that the product as sampled, and identified upon the delivery statement, has not been altered or mixed with any other. (Tentative 1981.)

ATTACHMENT C

No. 32

1979

OFFICIAL PUBLICATION

Association of American Plant Food Control Officials



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Official Publication No. 32

COMMITTEE AND INVESTIGATOR REPORTS

LABELING COMMITTEE

D. L. Terry, Chairman

During the past year the committee was involved mainly in attempting to develop proper labeling for coated slow release products, specifically, sulfur coated urea (SCU). The committee also reviewed numerous fertilizer labels for their acceptability under the Uniform Fertilizer Bill.

The proper labeling of coated slow release products, such as, SCU, was studied by the committee for most of the year resulting in a proposed revision to Rules 2 and 3 of the Uniform Fertilizer Bill. The proposed revision as recommended by the Labeling Committee is attached as Appendix A to this report.

The following guaranteed analyses statements are examples that would be acceptable under the proposed revision:

(1) Situation where the fertilizer is SCU:

36-0-0

GUARANTEED ANALYSIS

Total Nitrogen (N).....36%
3% Urea Nitrogen
33% Coated Slow Released Urea Nitrogen
Sulfur (S).....12%

(2) Situation where one-half of the N in a fertilizer is from SCU and one-half is from ammonium nitrate:

22-7-7

134

GUARANTEED ANALYSIS

Total Nitrogen (NO).....22%
5.5% Ammoniacal Nitrogen
5.5% Nitrate Nitrogen
1.0% Urea Nitrogen
10.0% Coated Slow Release Urea Nitrogen
Available Phos. Acid (P_2O_5)..... 7%
Soluble Potash (K_2O)..... 7%
Sulfur (S)..... 4%

(3) Situation where all the N in a mixed fertilizer is from SCU:

22-7-7

GUARANTEED ANALYSIS

Total Nitrogen (N).....22%
2% Urea Nitrogen
20% Coated Slow Release Urea Nitrogen
Available Phos. Acid (P_2O_5)..... 7%
Soluble Potash (K_2O)..... 7%
Sulfur (S)..... 7%

(4) Situation where all the N in a fertilizer is from encapsulated ammonium nitrate:

22-7-7

GUARANTEED ANALYSIS

Total Nitrogen (N).....22%
11% Coated Slow Release Ammoniacal Nitrogen
11% Coated Slow Release Nitrate Nitrogen
Available Phos. Acid (P_2O_5)..... 7%
Soluble Potash (K_2O)..... 7%

The committee or sub-groups within the committee reviewed one or more labels from about 15 different companies with the purpose of assisting the companies in developing labels acceptable under the Uniform Fertilizer Law as well as in complying with the requirements of certain specific states. We feel that these reviews are beneficial to the industry and give the committee insight into the problems of uniformity of labeling among the states.

In addition to reviewing labels the committee rendered the following opinions:

(1) All fertilizers whether liquid or dry must be labeled and sold on the basis of weight using the avoirdupois system. Liquid measure (fluid ounces) is not acceptable.
(2) The grade with a fourth digit, for example 10-10-10-8S, meaning sulfur or any other nutrient is not acceptable.
(3) The Uniform Fertilizer Law does not require a "nutrient source" statement to be on the label.

The committee held a formal meeting in El Paso and discussed label problems with specific companies and with the Industry in general. A copy of the summary of that meeting is attached as Appendix B to this report. A formal meeting is scheduled for the Williamsburg Annual AAPFCO meeting using the same format as last year.

APPENDIX A

2. Specialty Fertilizer Labels.
The following information, if not appearing on the face or display side in a readable and conspicuous form, shall occupy at least the upper-third of a side of the container.
(a) Net weight
(b) Brand and Grade
(c) Guaranteed Analysis:*
Total Nitrogen (N)**....._____%
_____% Ammoniacal Nitrogen
_____% Nitrate Nitrogen
_____% Water Insoluble Nitrogen
_____% "Other recognized and determinable forms of "N"
(Such as: _____% Urea Nitrogen)
Available Phosphoric Acid (P_2O_5)....._____%
Soluble Potash (K_2O)....._____%
"Other nutrients"[2] (elemental basis)***....._____%
(d) Sources of nutrients, when shown on the label, shall be listed below the guaranteed analsyis.
(e) Name and address of registrant.
3. Slowly Released Plant Nutrients.
(a) No fertilizer label shall bear a statement that connotes or implies that certain plant nutrients contain in a fertilizer are released slowly over a period of time, unless the nutrient or nutrients are identified and guaranteed.
(b) The types of slow released products recognized are (1) water insoluble (N products only), such as, natural organics, ur formaldehyde, IBDU, oxamide, etc., (2) coated slow release, such as, sulfur coated urea and other encapsulated soluble fertilizers, and (3) occluded slow released, where fertilizers or fertilizer materials are mixed with waxes, resins, or other inert materials and formed into particles. The terms, "water insoluble", "coated slow release", and "occluded slow release", are accepted as descriptive of these products, respectively, provided the manufacturer can show a testing program substantiating the claim (Testing under guidance of Experiment Station personnel or a recognized reputable

* If any percentage is zero (0), the nutrient shall be omitted from the statement.
** If chemical forms of N are claimed or required, the format shall be as shown and the percentages of the individual forms shall add up to the total nitrogen percentage.
*** As prescribed by regulation.

researcher acceptable to the _____.) A laboratory procedure, acceptable to the _____, for evaluating the slow release characteristics of the product(s) must also be provided by the manufacturer.

(c) To supplement (b) when the nitrogen is organic, it should be established that if a label states the amount of organic nitrogen present in a phrase, such as, "nitrogen in organic form equivalent to X%N", then the water insoluble nitrogen guarantee must not be less than 60% of the nitrogen so designated.
For example: If the total nitrogen guarantee for a fertilizer is 10% and the label states, "Nitrogen in organic form equivalent to 2.5% N" then the WIN guarantee must not be less than 1.5% (2.5% x 0.6 = 1.5%).

(d) When a slowly released nutrient is less than 15% of the guarantee for either total nitrogen (N), available phosphoric acid (P_2O_5), or soluble potash (K_2O), as appropriate, the label shall bear no reference to such designations.

(e) Until more appropriate methods are developed, AOAC method 2.064 (12th Edition), or as it shall be designated in subsequent editions, is to be used to confirm the coated slow release and occluded slow release nutrients and others whose slow release characteristics depend on particle size and AOAC method 2.062 (12th Edition) shall be used to determine the water insoluble nitrogen of organic materials.

APPENDIX B

The first part of the meeting was with industry representatives to discuss specific labeling problems and questions. The following items were agreed on by the committee:

(1) Placement of Speciality Fertilizer Labeling when the container is attached to a disply panel. The question was "Should the labeling information specified in Rule 2 of the Uniform State Fertilizer Bill be placed on both the container and the display panel or would placement on the panel be sufficient?" The consensus of the committee was that this information should be on both the container and the display panel.
It should be on the container because the display panel will probably be discarded after purchase and it should be on the display panel because it is what is mainly visible at time of purchase.

(2) Nitrogen breakdown in Guaranteed Analysis for Fish Emulsion Fertilizer. The following was approved:

Total Nitrogen (N).....5%
0% Nitrate nitrogen
0% Urea nitrogen
0.5% Ammoniacal nitrogen
0.5% Water insoluble nitrogen
4.0% Other water soluble nitrogen

Notes:

(a) Zero guarantees in general are not acceptable; however, for this specific label it will be allowed so that the term "other water soluble nitrogen" will correctly mean nitrogen that is soluble but is not nitrate, ammoniacal or urea nitrogen.

(b) Water insoluble nitrogen is guaranteed but no claims or statements such as, organic, slow acting, or slow release will be used since it is less than 15% of the total nitrogen.

(c) Industry chemists should continue to work on identifying the specific compounds included in "other water soluble nitrogen"and propose a procedure for their identification and quantification.

(3) The label of all liquid fertilizers should indicate net weight not volume.

(4) The definition of a "speciality fertilizer" was reaffirmed as being based on "use" rather than on package size.

(5) CSMA (Chemical Speciality Manufacturer's Association) requested that a representative from their organization be added to the Industry Liaison section of the committee. The request, which will be made formally by letter, was taken under advisement.

The last part of the meeting concerned the proposed revision of Rules 2 and 3 of the Uniform Bill which was circulated to the committee prior to the annual meeting. The discussion was limited by a shortage of time but the following salient points were discussed:

(1) It should be recognized that the phrase, "slowly available plant nutrients" is not restricted to nitrogen only but may include any plant nutrient.

(2) The collective term "slowly available plant nutrients" may need to be reworded since it is closely related, in general, to organic nitrogen and it should not be.

(3) Each committee member agreed to provide to the chairman his written comments concerning revision of Rule 2 and 3 by November 1, 1977.

ATTACHMENT D

OFFICIAL

METHODS OF ANALYSIS

OF THE

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS

WILLIAM HORWITZ, Editor

THIRTEENTH EDITION, 1980

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The methods of the Association were also copyrighted in 1916, when they were published in the *Journal of the Association of Official Agricultural Chemists*

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K_2SO_4 and continue stirring until all salt dissolves. Dil. to ca 1 L and mix. Cool, dil. to 1 L with H_2O, and mix. Avoid absorption of NH_3 from air during prepn particularly if stream of air is used for mixing.

For other reagents, see 2.055.

2.064 ***Determination***

Place 0.2–2.0 g sample contg ≤42 mg nitrate N in 500–800 mL Kjeldahl flask (800 mL flask is preferred with samples which foam considerably, especially orgs). Add 1.7 g Raney catalyst powder, 3 drops *tributyl citrate*, and 150 mL H_2SO_4-K_2SO_4 soln. If org. matter exceeds 0.6 g, add addnl 2.5 mL of this soln for each 0.1 g org. matter in excess of 0.6 g.

Swirl to mix sample with acid and place flask on cold burner. If burner has been in use, turn off completely ≥10 min before placing flask on burner. After flask is on burner, set heat input to 5 min boil test. When sample starts boiling, reduce heat to pass 10 min boil test. After 10 min, raise flask to vertical position and add 0.7 g HgO and 15 g K_2SO_4. (Contents of Kel-Pak No. 5 (Curtin Matheson Scientific, Inc.) without plastic container may be used.) Replace flask in inclined position and increase heat to 4–5 min boil test. (Reduce heat input if foam fills ≥⅔ of bulb of flask. Use variable heat input until this phase is past.) Heat at 4–5 min boil test until dense white fumes of H_2SO_4 clear bulb of flask. Digestion is now complete for samples contg only ammoniacal, nitrate, and urea N. For other samples, swirl flask gently and continue digestion addnl 30 min.

Proceed as in 2.057, second par. If 800 mL Kjeldahl flasks have been used, add 300 instead of 200 mL H_2O.

Ammoniacal Nitrogen

2.065 ***Magnesium Oxide Method—Official Final Action***

(Not applicable in presence of urea)

Place 0.7–3.5 g, according to NH_3 content of sample, in distn flask with ca 200 mL H_2O and ≥2 g *carbonate-free MgO*. Connect flask to condenser by Kjeldahl connecting bulb, distil 100 mL liq. into measured amt std acid, 2.055(j), and titr. with std NaOH soln, 2.055(k), using Me red, 2.055(l).

2.066 ★ ***Formaldehyde Titration Method*** ★ ***Official Final Action***

(Applicable to NH_4NO_3 and $(NH_4)_2SO_4$)

See 2.058, 11th ed.

Nitrate and Ammoniacal Nitrogen

2.067 ★ ***Ferrous Sulfate-Zinc-Soda Method*** ★ ***Official Final Action***

(Not applicable in presence of org. matter, Ca cyanamide, and urea)

See 2.059, 11th ed.

2.068 ***Devarda Method (23)—Official Final Action***

(Not applicable in presence of org. matter, Ca cyanamide, and urea)

Place 0.35 or 0.5 g sample in 600–700 mL flask and add 300 mL H_2O, 3 g *Devarda alloy* (Cu 50, Al 45, Zn 5), and 5 mL NaOH soln (42% by wt), pouring latter down side of flask so that it does not mix at once with contents. By means of Davisson (J. Ind. Eng. Chem. 11, 465(1919)) or other suitable scrubbing bulb that will prevent passing over of any spray, connect with condenser, tip of which always extends beneath surface of std acid in receiving flask. Mix contents of distg flask by rotating. Heat slowly at first and then at rate to yield 250 mL distillate in 1 hr. Collect distillate in measured amt std acid, 2.055(j), and titr. with std NaOH soln, 2.055(k), using Me red, 2.055(l).

Nitrate Nitrogen

2.069 ***Robertson Method (24)—Official Final Action***

(Applicable in presence of Ca cyanamide and urea. *Caution: See* 51.030 and 51.065.)

(a) Det. total N as in 2.058, 2.060, or 2.064.

(b) Det. H_2O-insol. N as in 2.072, but use 2.5 g sample. Dil. filtrate to 250 mL.

(c) Place 50 mL portion filtrate in 500 mL Kjeldahl flask and add 2 g $FeSO_4.7H_2O$ and 20 mL H_2SO_4. (If total N is >5%, use 5 g $FeSO_4.7H_2O$.) Digest over hot flame until all H_2O is evapd and white fumes appear, and continue digestion at least 10 min to drive off nitrate N. If severe bumping occurs, add 10–15 glass beads. Add 0.65 g Hg, or 0.7 g HgO, and digest until all org. matter is oxidized. Cool, dil., add the K_2S soln, and complete detn as in 2.057. Before distn, add pinch of mixt. of Zn dust and granular "20-mesh" Zn to each flask to prevent bumping.

Total N (a) − H_2O-insol. N (b) = H_2O-sol. N.

H_2O-sol. N − N obtained in (c) = nitrate N.

2.070 ***Jones Modification of Robertson Method (24) Official Final Action***

(Applicable when H_2O-sol. N need not be detd. *Caution: See* 51.030 and 51.065.)

Weigh 0.5 g sample into Kjeldahl flask, add 50 mL H_2O, and rotate gently. Add 2 g $FeSO_4.7H_2O$ and rotate. Add 20 mL H_2SO_4. Digest over hot flame. When H_2O evaps and white fumes appear, add 0.65 g Hg and proceed as in 2.057.

Total N − N thus found = nitrate N.

2.071 ★ **Water-Insoluble Nitrogen in Cyanamide (25)** ★ **Official Final Action**

See 2.063, 11th ed.

Water-Insoluble Nitrogen

(*See* 2.079(a) and (b) for urea-formaldehyde or mixts contg such compds.)

2.072 ***Method I—Official Final Action***

Place 1 or 1.4 g sample in 50 mL beaker, wet with alcohol, add 20 mL H_2O, and let stand 15 min, stirring occasionally. Transfer supernate to 11 cm Whatman No. 2 paper in 60° long-stem funnel 60 mm diam., and wash residue 4 or 5 times by decanting with H_2O at room temp. (20–25°). Finally transfer all residue to filter and complete washing until filtrate measures 250 mL. Det. N in residue as in 2.057.

Method II (26)—Official First Action

2.073 ***Apparatus***

Extraction tube.—Glass, 250 × 10 mm id, 12 mm od, constricted to 3–4 mm at one end.

2.074 ***Determination***

Weigh 3.0 g unground mixed sample and place in extn tube contg small glass wool plug. Place addnl glass wool pad on top

★ Surplus method—*see* inside front cover.

of sample. Connect 250 or 500 mL separator to column with 75 mm piece of rubber tubing. Close stopcock of separator and add 250 mL deionized H_2O. Open stopcock and let quick rush of H_2O pass thru column. After initial rush of H_2O, close stopcock. Adjust flow thru stopcock to ca 2 mL/min. Squeeze rubber connection to bring level of H_2O ca 25 mm above column bed. System then operates as constant-head feeder.

After H_2O wash is complete, disconnect column from rubber tubing. Invert column over Kjeldahl flask and force contents into flask with aid of pressure bulb. Wash traces of sample from tube into Kjeldahl flask and wash sample from walls of digestion flask with min. H_2O. Det. N in residue as in 2.059–2.060 or 2.063–2.064.

★ Nitrogen Activity ★

2.075 ***Removal of Water-Soluble Nitrogen***
Official Final Action

(a) *Mixed fertilizers.*—*See* 2.058, 10th ed.
(b) *Raw materials.*—*See* 2.058, 10th ed.

2.076 ***Water-Insoluble Organic Nitrogen Soluble in Neutral Permanganate***
Official Final Action

See 2.059, 10th ed.

2.077 ***Water-Insoluble Organic Nitrogen Distilled from Alkaline Permanganate (27)***
Official Final Action

See 2.060–2.061, 10th ed.

Nitrogen Activity Index (AI) of Urea-Formaldehyde Compounds (28)
Official Final Action

(Applicable to urea-formaldehyde compds and mixts contg such compds)

2.078 ***Reagent***

Phosphate buffer soln.—pH 7.5. Dissolve 14.3 g KH_2PO_4 and 91.0 g K_2HPO_4 in H_2O and dil. to 1 L. Dil. 100 mL of this soln to 1 L.

2.079 ***Determination***

(a) Crush sample (do not grind) to pass No. 20 sieve.

(b) Det. cold H_2O-insol. N (*WIN*) as in 2.072, keeping temp. at 25±2°. Stir at 5 min intervals during 15 min standing.

(c) Det. hot H_2O-insol. N (*HWIN*) in phosphate buffer soln as follows: Place accurately weighed sample contg 0.1200 g *WIN* in 200 mL tall-form beaker. Add ca 0.5 g $CaCO_3$ to mixed fertilizers contg urea-HCHO compds. From supply of boiling buffer soln, add 100 mL from graduate to sample, stir, cover, and immerse *promptly* in boiling H_2O bath so that liq. in beaker is below H_2O level in bath. Maintain bath at 98–100°, checked with thermometer, and stir at 10 min intervals. After exactly 30 min, remove beaker from bath and filter promptly thru 15 cm Whatman No. 12 fluted paper. If filtration takes >4 min, discard detn. Repeat detn, stirring in 1 g Celite filter-aid just before removing beaker from bath, and filter.

Wash insol. residue completely onto paper with boiling H_2O and continue washing until total vol. used is 100 mL. Complete washing before filtrate becomes cloudy or its temp. drops to <60°. Det. total N (*HWIN*) in wet paper and residue as in 2.057, using 35 mL H_2SO_4 when $CaCO_3$ has been added.

Activity index (AI) = (%*WIN* − %*HWIN*) × 100/%*WIN*

Urea (29)—Official Final Action

2.080 ***Reagent***

Neutral urease soln.—Use fresh com. 1% urease soln, or dissolve 1 g urease powder in 100 mL H_2O, or shake 1 g jack bean meal with 100 mL H_2O 5 min. Transfer 10 mL soln to 250 mL erlenmeyer, dil. with 50 mL H_2O, and add 4 drops Me purple (available from Fisher Scientific Co.; No. So-I-9). Titr. with 0.1*N* HCl to reddish purple; then back-titr. to green with 0.1*N* NaOH. From difference in mL, calc. vol. 0.1*N* HCl required to neutze remainder of soln (usually ca 2.5 mL/100 mL), add this amount of acid, and shake well.

Verify enzyme activity of urease source periodically. Discard any source which does not produce soln capable of hydrolyzing 0.1 g urea/20 mL soln.

2.081 ***Determination***

Weigh 10±0.01 g sample and transfer to 15 cm Whatman No. 12 fluted filter paper. Leach with ca 300 mL H_2O into 500 mL vol. flask. Add 75–100 mL satd $Ba(OH)_2$ soln to ppt phosphates. Let settle and test for complete pptn with few drops satd $Ba(OH)_2$ soln. Add 20 mL 10% Na_2CO_3 soln to ppt excess Ba and any sol. Ca salts. Let settle and test for complete pptn. Dil. to vol., mix, and filter thru 15 cm Whatman No. 12 fluted paper. Transfer 50 mL aliquot (equiv. to 1 g sample) to 200 or 250 mL erlenmeyer and add 1–2 drops of Me purple. Acidify with 2*N* HCl and add 2–3 drops excess. Neutze soln with 0.1*N* NaOH to first change in color of indicator. Add 20 mL neutral urease soln, close flask with rubber stopper, and let stand 1 hr at 20–25°. Cool flask in ice-H_2O slurry and titr. at once with 0.1*N* HCl to full purple; then add ca 5 mL excess. Record total vol. added. Back-titr. excess HCl with 0.1*N* NaOH to neut. end point.

% Urea = (mL 0.1*N* HCl − mL 0.1*N* NaOH) × 0.3003.

Biuret

Spectrophotometric Method (30)
Official First Action

(Applicable to urea only. Do not use for mixed fertilizers)

2.082 ***Reagents***

(a) *Alkaline tartrate soln.*—Dissolve 40 g NaOH in 500 mL H_2O, cool, add 50 g $NaKC_4H_4O_6.4H_2O$, and dil. to 1 L. Let stand 1 day before use.

(b) *Copper sulfate soln.*—Dissolve 15 g $CuSO_4.5H_2O$ in CO_2-free H_2O and dil. to 1 L.

(c) *Biuret std soln.*—1 mg/mL. Dissolve 100 mg reagent grade biuret in CO_2-free H_2O and dil. to 100 mL. Biuret may be purified as follows: Dissolve 10 g in 1 L absolute alcohol and conc. by gentle heating to ca 250 mL. Cool at 5° and filter thru gooch (60% recovery). Repeat crystn and dry final product in vac. oven at 80°.

2.083 ***Preparation of Standard Curve***

Transfer series of aliquots, 2–50 mL, of std biuret soln to 100 mL vol. flasks. Adjust vol. to ca 50 mL with CO_2-free H_2O, add 1 drop Me red, and neutze with 0.1*N* H_2SO_4 to pink color. Add, with swirling, 20 mL alk. tartrate soln and then 20 mL $CuSO_4$ soln. Dil. to vol., shake 10 sec, and place in H_2O bath 15 min at 30±5°. Also prep. reagent blank. Det. *A* of each soln against blank at 555 nm (instrument with 500–570 nm filter is also satisfactory) with 2–4 cm cell. Plot std curve.

★ Surplus method—*see* inside front cover.

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

IN THE MATTER OF THE PROPOSED RULE OF THE DEPARTMENT OF AGRICULTURE GOVERNING SOIL AND PLANT AMENDMENT LABELS AND LABELING REQUIREMENTS (3 MCAR S 1.0328)	))))	STATEMENT OF NEED AND REASONABLENESS

I. INTRODUCTION

The subject of this rulemaking is the proposed adoption by the Minnesota Department of Agriculture of a new rule governing soil and plant amendment labels and labeling requirements. This rule is proposed for adoption pursuant to Minnesota Statutes section 17.725, subd. 1, which authorizes the Department to establish rules for labels and labeling requirements for soil and plant amendments registered in Minnesota.

Rulemaking on the proposed rule was authorized by the Department on October 28, 1982. The commissioner of the Minnesota Department of Agriculture determined that the proposed adoption of this rule would be noncontroversial in nature due to consultations with representatives of the fertilizer industry and governmental pollution control officials. Further, the Department received no responses to its notice to solicit outside opinion in this matter. However, due to the provisions of Minnesota Statutes section 17.725, subd. 1, a public hearing will be held regarding the adoption of this rule.

The discussion provided in this statement is divided into the following parts:

Part II. General overview

Part III. Need for and reasonableness of the proposed rules

Part IV. Attachments

II. GENERAL OVERVIEW

A. The Need for Regulating Soil and Plant Amendments Labels and Labeling:

In order to understand the need for and reasonableness of this proposed rule, it will be useful to understand the context in which it is proposed. In 1967, the Department of Agriculture adopted rules governing "soil conditioners", and these rules were then amended in 1968. The rules defined products which were supposed to have some beneficial impacts on either the chemical or the physical properties of soils, and the rules covered only a limited number of products.

During the intervening years, a number of advances have been made in the scientific understanding of the value for agricultural uses of both soil conditioners, defined by 1981 statute as "soil amendments", and also plant amendments, also statutorily defined in 1981 (Laws of Minnesota, 1981, chapter 214). In addition to products which changed the chemical and physical properties of soils, technological development has made possible the enhancement of both soils and plants by the introduction of "biologicals", or live organisms. This advanced understanding and these technological developments have rendered the former rules totally inadequate; thus, the present rules are being repealed, and these new, substantially different rules are being proposed.

These rules are necessary because there has been a great influx into the market of these types of products claiming benefit for agricultural crops. While many such products can provide the particular benefit claimed, there are many which are of no value at all for agricultural use. Prior to 1981, the Department had no statutory authority to regulate these types of products. In 1981, the Legislature responded to consumer complaints and suspected instances of fraud in connection with some of these products by passing legislation to define these products, and gave the Department authority to register them and regulate their sale. Thus, this rule is necessary for the Department to carry out its statutory responsibility to regulate these products. Because it is also necessary from the consumer standpoint that the Department identify products that are beneficial, the proposed rule identifies soil and plant amendments which may be guaranteed for some agricultural use and also provides criteria for their labels and labeling. The standards in this proposed rule are reasonable because they have been informally discussed with and agreed to by the representatives of the fertilizer industry, other governmental agencies and fertilizer experts at the University of Minnesota. It is also generally reasonable that the Department propose standards to protect consumers from misleading claims for products with little or no actual value for agricultural use.

Another area covered by this proposed rule is the label and labeling requirement for sewage sludge. While general jurisdiction over

sewage sludge lies with Minnesota Pollution Control Agency, 1982 amendments to the Minnesota Fertilizer Law (Minnesota Statutes sections 17.711 to 17.729; Laws of Minnesota, 1982, chapter 425) gave authority to the Department of Agriculture to create requirements for the labeling of sewage sludge. For approximately 10 years, certain beneficial claims have been made for sewage sludge, which is an intermediate type of product with some characteristics of fertilizers and some characteristics of soil amendments. The proposed rule sets certain requirements for labeling sewage sludge so that those responsible for a landspreading site using the sewage sludge can accurately assess its impact in combination with other products they may be using on the site. The Department of Agriculture and the Minnesota Pollution Control Agency agree on the label and labeling requirements for sewage sludge proposed in this rule.

B. Format of the Proposed Rule:

The proposed rule is set forth in the following manner: Authority and purpose; definitions, label requirements; labeling and labels; and enforcement.

In this statement, for the sake of brevity, the content of the rule has not been repeated, but the numbers of the parts of the rule have been noted for reference.

III. NEED FOR AND REASONABLENESS OF THE PROPOSED RULE

The need for and reasonableness of each part of the proposed rule follows.

3 MCAR S 1.0328 A. Authority and Purpose

This section is necessary and reasonable to clarify for readers and users the purpose of this rule governing soil and plant amendments labels and labeling requirements, and the authority by which the commissioner proposes the adoption of the rule.

3 MCAR S 1.0328 B. Definitions

This part of the rule sets forth the definitions of terms used in the rule which are necessary to clarify meanings for readers and users of the rule. All terms used for the purposes of this rule are defined in Minnesota Statutes section 17.713.

3 MCAR S 1.0328 C. Label Requirements

The first section of this part of the rule regarding label information requirements for soil or plant amendments sold or distributed in Minnesota is necessary to identify required information for those who will be labeling such products, and it is necessary because it is a requirement of Minnesota Statutes section 17.716, subd. 6. It is a reasonable requirement for consumer information and protection. It is further reasonable because it is similar in content, format, and order to label information for fertilizers (proposed 3 MCAR S 1.0327) and thus will not be unfamiliar to members of the industry who are required to label soil or plant amendments.

The second section of this part of this rule contains exemptions from the required labeling of such products as "not a plant food product" in cases when the products, in fact, do contain fertilizer materials. These exemptions are necessary because fertilizer materials are beneficial as plant food. This section provides for two cases. If the soil or plant amendment contains enough fertilizer material to meet the statutory plant food requirement level, the product must be labeled in accordance with proposed rule 3 MCAR S 1.0327. If the soil or plant amendment does not contain enough fertilizer materials to meet the statutory plant food requirement level, the label should warn consumers of the product's fertilizer content because the combination of such materials with other commercial fertilizers could be detrimental rather than beneficial to agricultural crops. The exemptions are reasonable from the standpoint of alerting consumers as to the content of the product being purchased.

The third section of this part of the rule, regarding the information which must be contained in a sewage sludge analysis, is necessary to inform the owner, renter, or lessee of the landspreading site of the components of the sewage sludge to be spread. The information is necessary so that the components can be assessed with respect to their direct impact on agricultural crops as well as for their impact in

combination with other fertilizers. Too much of a heavy metal, for example, is inimical to life processes and may be very detrimental to the growth of agricultural crops. The requirements for labeling the sewage sludge proposed in this section are reasonable because they will inform consumers of all possible ingredients that will have some impact on plant growth or soil micro-organisms. The Minnesota Pollution Control Agency and the Department of Agriculture together developed and agree on these items to be included in sewage sludge analyses in accordance with Minnesota Statutes section 17.713, subd. 17 a. and Laws of Minnesota, 1982, chapter 425, section 17. The Minnesota Pollution Control Agency will include this same list for sewage sludge analysis in its rules to be proposed in the near future.

The fourth and fifth sections of this part of the rule regarding the placement of labels on packages and the information to accompany the bulk delivery of soil or plant amendments or sewage sludge is necessary because they are requirements of Minnesota Statutes section 17.716, subds. 3 and 6. It is reasonable to provide conspicuous labeling for consumer protection and the provisions are also reasonable because they are consistent with another rule currently being proposed by the Department (3 MCAR S 1.0327).

3 MCAR S 1.0328 D. Labeling and Labels

This part of the rule, regarding proposed labels and labeling of soil and plant amendments, is necessary because it is a requirement of Minnesota Statutes section 17.714, subd. 3. It is reasonable that the Department require submission of labels and labeling at the time of request for registration of the product so that the Department can verify any claims made by the company on promotional materials which may accompany the soil or plant amendments. Submission of both labels and labeling will allow the Department to assure that the information provided on the label is consistent with claims made in promotional materials. This is a reasonable requirement for consumer protection in order that consumers will not be confused by conflicting information between labels and promotional statements.

3 MCAR S 1.0328 E. Enforcement

This part of the rule is necessary to inform persons labeling soil or plant amendments or sewage sludge for registration and subsequent sale or distribution in Minnesota of the commissioner's intent to act and procedures for the commissioner's action in instances where provisions of this rule are not met. Further, it is necessary to inform persons labeling soil or plant amendments or sewage sludge of their rights should they fail to meet the requirements of this rule.

This section is also reasonable since persons labeling soil or plant amendments or sewage sludge are entitled to know the consequences of failing to meet the provisions of the rule and are also entitled to know that the commissioner will afford opportunities for hearings before canceling registrations when provisions of this rule are not met.

IV. ATTACHMENTS

The following attachments are relevant to this statement and are appended.

Attachment A - Excerpt from Laws of Minnesota, 1982, chapter 425, section 17, directing the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency to jointly develop labeling requirements for sewage sludge.

Attachment B - Minnesota Pollution Control Agency's currently required analysis for sewage sludge used on landspreading sites, 6 MCAR S 4.6111 A. 5.

The commissioner may apply appropriate, efficient procedures to contain and control fertilizers and soil and plant amendments involved in an emergency incident likely to cause adverse effects on the environment. For purposes of this section "incident" includes a flood, fire, tornado, or motor vehicle accident, which unintentionally releases fertilizers and soil and plant amendments on the environment. Persons involved in or responsible for an incident shall report the incident to the commissioner immediately upon discovering the incident. The department of agriculture shall be the lead government agency for decisions involving the emergency.

Sec. 17. Minnesota Statutes 1981 Supplement, Section 116.07, Subdivision 4, is amended to read:

Subd. 4. **RULES AND STANDARDS.** Pursuant and subject to the provisions of chapter 15, and the provisions hereof, the pollution control agency may adopt, amend and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1969, Chapter 1046, for the prevention, abatement, or control of air pollution. Any such rule or standard may be of general application throughout the state, or may be limited as to times, places, circumstances, or conditions in order to make due allowance for variations therein. Without limitation, rules or standards may relate to sources or emissions of air contamination or air pollution, to the quality or composition of such emissions, or to the quality of or composition of the ambient air or outdoor atmosphere or to any other matter relevant to the prevention, abatement, or control of air pollution.

Pursuant and subject to the provisions of chapter 15, and the provisions hereof, the pollution control agency may adopt, amend, and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1969, Chapter 1046, for the collection, transportation, storage, processing, and disposal of solid waste and the prevention, abatement, or control of water, air, and land pollution which may be related thereto, and the deposit in or on land of any other material that may tend to cause pollution. The agency shall adopt such rules and standards for sewage sludge, addressing the intrinsic suitability of land, the volume and rate of application of sewage sludge of various degrees of intrinsic hazard, design of facilities, and operation of facilities and sites. The agency shall promulgate temporary rules for sewage sludge pursuant to section 15.0412, subdivision 5. Notwithstanding the provisions of section 15.0412, subdivision 5, the temporary rules shall be effective until permanent rules are promulgated or March 1, 1982, whichever is earlier. Any such rule or standard may be of general application throughout the state or may be limited as to times, places, circumstances, or conditions in order to make due allowance for variations therein. Without limitation, rules or standards may relate to collection, transportation, processing, disposal, equipment, location, procedures, methods, systems or techniques or to any other matter relevant to the prevention, abatement or control of water, air, and land pollution which may be advised

through the control of collection, transportation, processing, and disposal of solid waste and sewage sludge, and the deposit in or on land of any other material that may tend to cause pollution. By January 1, 1983, the rules for the management of sewage sludge shall include an analysis of the sewage sludge determined by the commissioner of agriculture to be necessary to meet the soil amendment labeling requirements of section 17.716.

Pursuant and subject to the provisions of chapter 15, and the provisions hereof, the pollution control agency may adopt, amend and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1971, Chapter 727, for the prevention, abatement, or control of noise pollution. Any such rule or standard may be of general application throughout the state, or may be limited as to times, places, circumstances or conditions in order to make due allowances for variations therein. Without limitation, rules or standards may relate to sources or emissions of noise or noise pollution, to the quality or composition of noises in the natural environment, or to any other matter relevant to the prevention, abatement, or control of noise pollution.

As to any matters subject to this chapter, local units of government may set emission regulations with respect to stationary sources which are more stringent than those set by the pollution control agency.

Pursuant to chapter 15, the pollution control agency may adopt, amend, and rescind rules and standards having the force of law relating to any purpose within the provisions of this chapter for the management, identification, labeling, classification, storage, collection, treatment, transportation, processing, and disposal of hazardous waste and location of hazardous waste facilities. A rule or standard may be of general application throughout the state or may be limited as to time, places, circumstances, or conditions. The public utilities commission, in cooperation with the pollution control agency, shall set standards for the transportation of hazardous waste in accordance with chapter 221. In implementing its hazardous waste rules, the pollution control agency shall give high priority to providing planning and technical assistance to hazardous waste generators. The agency shall assist generators in investigating the availability and feasibility of both interim and long term hazardous waste management methods. The methods shall include waste reduction, waste separation, waste processing, resource recovery, and temporary storage.

The pollution control agency shall give highest priority in the consideration of permits to authorize disposal of diseased shade trees by open burning at designated sites to evidence concerning economic costs of transportation and disposal of diseased shade trees by alternative methods.

Approved March 18, 1982

ATTACHMENT A

Chapter Six: Landspreading Sites

6 MCAR § 4.6111 Requirements and limitations. The following requirements and limitations apply to the management of landspreading sites.

A. Sewage sludge sampling and analysis.

1. Sewage sludge samples shall be representative of the sewage sludge to be landspread.

2. In the case of digesters and liquid storage tanks, a representative sample shall be composed of at least four grab samples composited over a 24-hour period prior to landspreading.

3. In the case of lagoons, stockpiles, drying beds, and compost piles, a representative sample shall be composed of at least ten grab samples composited from the sewage sludge prior to landspreading.

4. Other recommended sampling and handling procedures are provided in 6 MCAR § 4.6131.

5. Sewage sludge shall be analyzed according to methods set forth in 6 MCAR § 4.6131 for the following parameters:

a. percentage of total solids;
b. volatile solids as percentage of total solids;
c. pH;
d. nitrogen, including the percentages of kjeldahl, ammonia and, in the case of aerobically digested and composted sewage sludges only, nitrate;
e. total weight of heavy metals, including milligrams per kilogram of zinc, copper, lead, nickel, cadmium, chromium and mercury; and
f. polychlorinated biphenyls expressed as milligrams per kilogram.

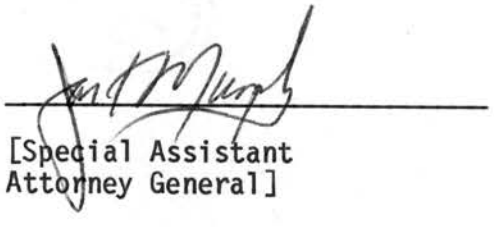
All analytical values, except pH and total solids, shall be recorded on a dry weight basis.

6. The minimum frequency of sewage sludge sampling and analysis is given in Exhibit 6 MCAR § 4.6111 A.6.-1.

In the Matter of the Proposed Amendments to Rules of the Department of Agriculture Governing Fertilizer Labels and Labeling Requirements (Agr 319-323) and the Proposed Adoption of Rules Governing the Storage and Handling of Liquid and Dry Commercial Fertilizers (3 MCAR §§ 1.0325-1.0326) and Soil and Plant Amendment Labels and Labeling Requirements (3 MCAR § 1.0328)

STATEMENT OF COMPLIANCE WITH RULEMAKING PROCEDURES

I, [Special Assistant Attorney General] Jon Murphy, do hereby declare that I have examined the rules and all related documents and that, based on my examination and my personal familiarity with the applicable procedures, the Administrative Procedure Act, the rules of the Office of Administrative Hearings, and the rules of the Attorney General have been followed. Any exceptions are noted below.



[Special Assistant Attorney General]

Date: May 12, 1983