Colorado Department of Agriculture

Plant Industry Division

Rules and Regulations Pertaining to the Administration and Enforcement of the Colorado Chemigation Act

8 CCR 1203-8

SECTION 1. TERMS DEFINED AND CONSTRUED

1.01. All terms used in the singular form in these rules shall include the plural, and vice versa, as the case may be. All terms used in these rules shall have the meaning set forth for such terms in the Act. In addition the following terms shall be defined as follows.

1.02. "Backflow prevention check valve" means a valve to prevent backflow of irrigation water.

1.03. "Chemical injection line check valve" means the check valve in the chemical injection line.

1.04. "District" means ground water management district.

1.05. "Irrigator" or "Chemigator" means any person employing any device or combination of devices having a hose, pipe, or other conduit, which connects directly to any source of ground or surface water through which water or a mixture of water and chemicals is drawn and applied for agricultural or horticultural purposes.

1.06. "Open discharge system" means a system in which the water is pumped or diverted directly into a ditch or canal in such a manner that the force of gravity at the point of discharge into the ditch or canal cannot cause water to flow back to the point from which the water was pumped or diverted.

1.07. "Permit holder" means the owner or operator of land who applies or authorized the application of chemical to such land by means of chemigation. The permit holder shall be the party primarily responsible for any liability arising from chemigation on the property.

1.08. "Permittee" means the person to whom the permit is issued.

1.09. "Pipeline check valve" means a backflow prevention pipeline check valve.

SECTION 2. AFFIDAVIT OF NON-CHEMIGATION

2.01. Affidavits shall be submitted annually by March 31 by persons who do not utilize or intend to utilize chemigation. Such affidavits shall be made on a form provided by the Department.

2.02. The affidavit shall provide:

(a) Name, address and telephone number of the irrigator;

(b) Legal description of the location of the irrigation water source; and

(c) Signature and date of affidavit.

SECTION 3. CHEMIGATION PERMITS

3.01. No person shall apply or authorize the application of chemicals to land or crops through the use of chemigation, unless such person has first obtained a permit from the Department, except that nothing in this chapter shall require a person to obtain a chemigation permit to pump or divert water to or through a open discharge system.

3.02. An application must be filed with the Department for any one of the following chemigation systems:

(a) One water source feeding to a single injection site.

(b) One water source feeding to more than a single injection site.

(c) More than one water source feeding to a single injection site.

3.03. The following information is the minimum requirement of the Department:

(a) Name, address and telephone number of applicant;

(b) Name, address and telephone number of operator, if different from above;

(c) Calendar year for which application is made;

(d) Legal description of the injection location site, defined to the quarter of quarter section (forty-acre increment);

(e) Whether the application is for an initial or renewal permit;

(f) Certification that the permit applicant's irrigation system includes properly installed and functioning equipment in compliance with the provisions of the Colorado Chemigation Act and Regulations;

(g) Signature of the permit applicant and date of signing.

3.04. All applications for a chemigation permit must be completed on forms provided by the Department. Applications for renewal permits shall be mailed to permittees not later than February 1 of each year.

3.05. The Department shall provide each permittee an annual certificate of the permit as evidence of purchase and payment for the permit.

3.06. The Department shall deny a permit and/or renewal to any applicant for the following reasons:

(a) The applicant has failed to provide the required information;

(b) The backflow prevention device does not comply with the equipment standards;

(c) Failure of the applicant to remit the appropriate fee and all outstanding inspection fees;

(d) Fraud or deceit was used in obtaining a permit.

3.07. The permit holder shall notify the Department in writing within ten days of any changes in the information provided on the permit application.

3.08. Permits shall expire at midnight on March 31 of the year subsequent to the date the permit was issued.

3.09. A permit may be renewed each year upon payment of the annual renewal fee and completion of an application form providing all the information requirements.

3.10. Permits not renewed on or before their expiration date shall not be reinstated without filing a new application.

3.11. Permits are not transferable.

SECTION 4. PERMIT AND INSPECTION FEES

4.01. The annual permit fee shall be thirty-five dollars ($35.00) for permits issued to permit holders outside of Groundwater Management Districts that have contracted with the Department for enforcement of Section 35-11-113 of the Chemigation Act, effective January 1, 2007.

4.02. The annual permit fee shall be thirty-five dollars ($35.00) for permit holders within Groundwater Management Districts that have contracted with the Department for enforcement of Section 35-11-113 of the Chemigation Act, effective January 1, 2007.

4.03. The inspection fee shall be forty dollars ($40.00) for the inspections conducted by the Commissioner.

4.04. Upon completion of an inspection of a chemigation system conducted by the Commissioner, the permit holder shall be provided a billing for inspection of each chemigation system.

4.05. Payment of the inspection fee shall be made to the Department within forty-five (45) days of the date of the inspection for inspections conducted by the Commissioner.

4.06. Failure to submit payment of the inspection fee(s) to the Department or to a Groundwater Management District shall constitute a violation of these rules and regulations and shall be grounds for suspension or revocation of the permit.

4.07. No permit shall be renewed until the permittee has paid all outstanding inspection fees.

4.08. In the event that it is apparent to the Commissioner that no willful violation has occurred, there shall be no fee charged for the first reinspection of any system that fails to meet the standards set forth in Section 6.16 of these rules and regulations.

(a) A permittee who fails to correct a malfunctioning system by the time of the first reinspection by the Commissioner shall be required to pay the inspection fee for any subsequent inspection.

4.09. Each irrigation system for which a permit has been issued may be inspected at least once every two years.

SECTION 5. ENFORCEMENT AGREEMENTS (GROUND WATER MANAGEMENT DISTRICTS)

5.01. The Department may enter into an agreement with any ground water management district which can demonstrate the availability of properly trained and equipped staff to carry out the provisions of the statute and rules and regulations promulgated thereunder.

5.02. As used in section 5.01, “properly trained staff” refers to employees who have substantially similar training and skills as the chemigation inspectors employed by the Department, including:

(a) Knowledge of pesticide and fertilizer toxicities and hazards;

(b) Ability to investigate, collect and preserve evidence for use in administrative or court proceedings;

(c) Knowledge of the state chemigation laws, rules, and regulations pertaining to it;

(d) Knowledge of irrigation systems and how chemigation is implemented;

(e) Ability to establish and maintain effective working relationships with growers being regulated;

(f) Ability to express oneself clearly and concisely, both orally, and in writing;

(g) Skill in making thorough inspections of chemigation equipment and making judgments concerning corrective actions.

5.03. As used in section 5.01, “properly equipped staff” means that the district's chemigation enforcement staff are furnished with operational and protective equipment which is substantially similar to such equipment which the Department furnishes for the use of its chemigation inspectors in the performance of their duties.

5.04. In the event a district desires to withdraw from an agreement, the district shall provide the Department one year's notice of said intent. In the event a district desires to renew an agreement, it shall notify the Department of such intent not less than one year prior to the expiration date of the agreement.

5.05. Each district having a current enforcement agreement in effect shall submit an annual report to the Department on or before June 1 of each year, which shall include the following information for the previous year:

(a) The number of chemigation system inspections made by the district at each injection site identified and whether the inspections were initial inspections, for equipment replacement or repair, or routine monitoring;

(b) The number of violation notices issued and actions taken.

5.06. The district shall maintain a complete file of all records, communications, and other written materials which will pertain to the operation of programs or the delivery of services under the Agreement, and shall maintain such records for a period of three (3) years, or for such further period as the Department may request. The District shall permit the Department or other authorized governmental agency to audit and/or inspect its records during the term of the Agreement and for a period of two (2) years following the termination of the Agreement.

SECTION 6. EQUIPMENT, STANDARDS AND INSTALLATION

6.01. Any irrigation distribution system through which chemigation is performed, except open discharge systems, shall be equipped with the mechanical devices specified below. The equipment shall be permanently installed in accordance with the manufacturer's specifications and at the location specified therein.

6.02. The irrigation pipeline check valve shall be located in the pipeline between the irrigation pump and the point of chemical injection into the irrigation pipeline. Its purpose is to prevent reverse flow, which is a mixture of water and chemical draining or siphoning back into the irrigation water source.

6.03. Irrigation systems which, as of July 1, 1989, were equipped with a properly located irrigation pipeline check valve shall be considered in compliance with these rules if the valve provides a seal against reverse flow.

6.04. Repealed.

6.05. The vacuum relief valve shall be located on the pipeline between the irrigation pump and the irrigation pipeline check valve. Its purpose is to prevent creation of a vacuum in the pipeline and possible reverse flow into the water source when the pump stops.

6.06. The vacuum relief valve shall be sized in accordance with the manufacturer's specifications.

6.07. If the vacuum relief valve connection will also serve as the inspection port, the permit holder will ensure removal of the valve at the time of inspection. The inspection port shall be located on the pipeline between the irrigation pump and the irrigation pipeline check valve. The inspection port shall be situated in such a manner that the inlet to the low pressure drain can be observed. A minimum four-inch or larger diameter port is required. If a chemigation system has a vacuum relief valve of a minimum two inch diameter, which was in place as of the effective date of these rules, and the irrigator will ensure its removal at the time of each inspection, such valve may be used as the inspection port.

6.08. An automatic low-pressure drain shall be located so as to drain any water-chemical mixture which may enter the pipeline between the irrigation pump and the irrigation pipeline check valves by reverse flow when the pump stops. When the pipeline water flow stops, the drain valve shall automatically open. A tube, pipe or other conduit shall be used to discharge the solution at least twenty feet downslope from the irrigation water source or otherwise prevent it from collecting on the ground surface around the well casing.

6.09. The drain valve shall be constructed of corrosion resistant material or otherwise coated or protected to prevent corrosion.

6.10. The drain shall have an orifice of at least three-quarter inch diameter.

6.11. The chemical injection line check valve shall be located at the point of chemical injection into the irrigation pipeline. Its purpose is to prevent flow of water from the irrigation system into the chemical supply tank and to prevent gravity flow from the chemical supply tank into the irrigation pipeline. The valve shall be constructed of chemically resistant materials. The valve shall be designed to prevent water in the irrigation pipeline under operating pressure from entering the chemical injection line.

6.12. Repealed.

6.13. The irrigation pumping plant and the chemical injection pump shall be interlocked so that if the pumping plant stops, the injection pump will also stop. Its purpose is to prevent pumping chemicals into the irrigation pipeline after the irrigation pump stops.

6.14. Repealed.

6.15. Replacement equipment shall meet specified requirements and in the case of irrigation pipeline check valves, shall meet the following minimum requirements:

(a) The valve body and all components shall be constructed of corrosion resistant materials or otherwise coated or protected to prevent corrosion;

(b) The valve shall contain a sealing mechanism designed to close prior to or at the moment water ceases to flow in the downstream direction. This mechanism shall be either diaphragm-actuated by hydraulic line pressure, spring loaded or weight loaded to provide a watertight seal against reverse flow;

(c) All moving components of the valve shall be designed to prevent binding, distortion or misalignment during water flow; and

(d) The valve shall be designed to allow repair and maintenance, including removal from the pipeline if required to perform such work.

6.16. The equipment required in these rules and regulations shall be maintained in working condition. When required, the equipment shall be repaired to its originally designed condition.

SECTION 7. REPEALED

SECTION 8. EXEMPTIONS

In those instances in which irrigation water is drawn from a reservoir at an elevation higher than the point of chemical injection, the permittee may be exempted from Section 35-11-107(1)(a), (b) or (c) of the Chemigation Act if there is no possibility that the water source can be polluted or contaminated as the result of utilizing such irrigation system for chemigation.

SECTION 9. SEVERABILITY

If any clause, paragraph, subsection or section of these regulations shall be held invalid, it shall be conclusively presumed that the remainder of these regulations not directly related to such clause, paragraph, subsection or section shall not be invalid.

The effective date of these Rules and Regulations is July 1, 1989.

SECTION 10. – 12. RESERVED

SECTION 13. STATEMENTS OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE

13.01. Adopted March 31, 1989 – Effective July 1, 1989

Pursuant to the provisions and requirements of the Chemigation Act to regulate the application of fertilizers or pesticides to land or crop through irrigation systems, Title 35, Article 11, CRS, the following rules and regulations are hereby promulgated.

The purpose of these rules and regulations is to comply with the provisions of the associated statute and to provide specific guidelines for the safe and effective application of fertilizers and pesticides to land or crops though irrigation systems.

The regulations are designed to:

Set standards for the installation and maintenance of antisyphoning devices within irrigation systems employing Chemigation that will prevent the contamination of ground waters in the event of a power or equipment malfunction;

Establish inspection procedures;

Establish procedures and policies for entering into agreements with ground water management districts for the purpose of enforcing the provisions of Article 11 within the boundaries of the district;

Set procedures for monitoring the activities of ground water management districts that have entered into agreements with the Department; and

Determine permit and inspection fees.

13.02. Adopted September 4, 1992 – Effective January 1, 1993

The following rules are hereby promulgated under the authority of the Colorado Chemigation Act, pursuant to Sections 35-11-104(1) (c), C.R.S. (1991 Supp.). They deal with the raising of permit fees.

It has become necessary to raise permit fees in order to help provide the revenue needed to cover all costs of operating the chemigation inspection program. Raising of permit fees has been made possible by amendments in Senate Bill 92-28, which removes the caps on permit and inspection fees in section 35-11-106(3) and (4) of the Chemigation Act. The chemigation inspection program is totally self-funded and no startup moneys were provided by the legislature when the enabling legislation was passed. It was necessary to borrow money from the state treasurer in order to initiate the program prior to the receiving of any revenues from permit and inspection fees. An increase in revenue is needed to pay back the loan and maintain the program at the current level.

All permit fees are raised to forty-five dollars both inside and outside Groundwater Management Districts that have contracted with the Department of Agriculture to perform inspections under the authority of the Chemigation Act. The cost to the Department of permitting and providing follow-up legal action inside the contracting districts is equally as great as the cost outside the contracting districts.

13.03. Adopted February 20, 2002 – Effective March 30, 2002

These amendments pertain to Section 1 Terms Defined and Construed, Section 2 Affidavit of Non-Chemigation, Section 3 Chemigation Permits, Section 6 Equipment, Standards and Installation, Section 8 Exemptions and the furtherance and enforcement of the provisions of the Colorado Chemigation Act, C.R.S. § § 35-11-101 through 117.

13.04. Adopted November 13, 2006 – Effective January 1, 2007

Statutory Authority

This amendment to the rules is adopted by the Commissioner of Agriculture pursuant to his authority under the Colorado Chemigation Act, § 35-11-104 (1)(c), C.R.S. (2006).

Purpose

The purpose of these amendments to the rules is to: (1) reduce the annual permit fee from $45.00 to $35.00 for permits issued to permit holders outside of Ground Water Management Districts that have contracted with the Department for the enforcement of § 35-11-113 of the Chemigation Act; (2) reduce the annual permit fee from $45.00 to $35.00 for permit holders within Ground Water Management Districts that have contracted with the Department for enforcement of § 35-11-113 of the Chemigation Act; and (3) to include a section for Statements of Basis, Specific Statutory Authority and Purpose for this rule.

Factual and Policy Issues

The factual and policy issues encountered in the proposal of these amendments to the rules are as follows:

Pursuant to the Colorado Chemigation Act § 35-11-106 (3), the fee for a chemigation permit and the annual renewal fee shall be established by the Commissioner through rules and regulations. Such fees shall reflect all direct and indirect costs of the Department for the administration of this article. A $35.00 annual permit is adequate to cover all direct and indirect costs.

13.05. Adopted April 12, 2011 – Effective May 30, 2011

Statutory Authority

This amendment to the rules is adopted by the commissioner of Agriculture pursuant to his authority under the Colorado Chemigation Act, § 35-11-104 (1) (b), C.R.S.

Purpose

The purpose of these amendments to the rules is to: (1) In Section 6.03, eliminate the reference to the criteria in Section 7.01; (2) Repeal Section 6.04 requiring all models of pipeline check valves and chemical injection line check valves be tested after July 1, 1989 by the Colorado Water Resource Research Institute, Colorado State University; (3) Repeal Section 6.12 eliminating the minimum opening (cracking) pressure of 20 psi when the chemical injection pump is shut down; (4) Repeal Section 7, Laboratory Test Criteria.

Factual and policy issues

The factual and policy issues encountered in the proposal of these amendments to the rules are as follows:

1. Pursuant to the Colorado Chemigation Act, § 35-11-107 (1), C.R.S., an irrigation system utilizing chemigation on and after January 1, 1990, or an irrigation system which has been issued a provisional chemigation permit shall have, as component parts thereof, a properly installed and functioning:

(a) Backflow prevention check valve and vacuum relief valve between the main check valve and the irrigation pump;

(b) Inspection port to check the performance of the check valve on the irrigation pipeline;

(c) Automatic low-pressure drain placed between the main check valve and the irrigation pump so that a chemical will drain away from the source of water supply;

(d) Check valve in the chemical injection line; and

(e) Simultaneous interlock device between the power system of the chemical injection unit and the irrigation pumping plant to protect the water supply from contamination in the event such pumping plant ceases to operate.

2. Currently, permitted irrigation systems are inspected to verify that all the back flow prevention devices listed above are properly installed and performing their intended purpose to prevent the reverse flow of a water chemical mixture back to the water source. Backflow prevention check valves are visually observed while under water pressure to ensure the valve is holding water and are also manually checked to ensure no bubbles or blisters are forming on the lining of the valve. Check valves in the chemical injection line are also observed under water pressure to verify that water is not allowed to flow back to the chemical holding tank. These valves are essentially inspected under field conditions in which they are expected to perform.

3. Chemical injection check valves are inspected during the field inspection; however, there is no way to determine if the valve has a minimum opening (cracking) pressure of 20 psi. Also, gravity flow of chemical from the chemical supply tank in to the irrigation pipeline does not occur due to the chemical injection pump stopping the flow when the irrigation system is shut down.

4. The testing of one valve for each model and size a manufacturer produces does not necessarily ensure that all the valves manufactured in that model and size will perform as well as the one tested. A field inspection of these valves provides a better indication that they are performing as designed.

5. Most manufacturers of irrigation line check valves place a sticker on the valve identifying who manufactured the valve. Often times these stickers fall off due to weather or time and it is difficult to identify who the manufacturer is thereby making it more difficult to determine if that model of valve was tested.