

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 6. DEPARTMENT OF ENVIRONMENTAL QUALITY
PESTICIDES AND WATER POLLUTION CONTROLARTICLE 1. NUMERIC VALUES AND INFORMATION
SUBMITTAL

Article 1 consisting of Sections R18-6-101 through R18-6-105 adopted effective May 10, 1988.

Section

- R18-6-101. Definitions
 R18-6-102. Agricultural Use Pesticide Submittal Requirements
 R18-6-103. Agricultural Use Active Ingredient Evaluation
 R18-6-104. Monitoring and Testing
 R18-6-105. Repealed
 R18-6-106. Informational Requirements for a Pesticide Formulator

ARTICLE 2. PESTICIDE CONTAMINATION PREVENTION

Article 2 consisting of Section R18-6-201 repealed effective September 23, 1992 (Supp. 92-3).

Article 2 consisting of Section R18-6-201 adopted effective August 27, 1987.

Section

- R18-6-201. Repealed

ARTICLE 3. GROUNDWATER PROTECTION LIST

Article 3 consisting of Section R18-6-302 adopted effective May 10, 1988.

Section

- R18-6-301. Groundwater Protection List
 R18-6-302. Findings and Determinations
 R18-6-303. Requirements for an Agricultural Use Pesticide on the Groundwater Protection List

ARTICLE 1. NUMERIC VALUES AND INFORMATION
SUBMITTAL

R18-6-101. Definitions

In addition to the definitions established in A.R.S. § 49-301, the following terms apply to this Chapter:

1. "Agricultural use pesticide" means any pesticide intended for use directly on a crop. An agricultural use pesticide does not include animal pesticide cartags or pesticides intended solely for use within and around a confined structure.
2. "Crop" means any plant, animal, plant product, or animal product produced for commercial or research purposes.
3. "Data generator" means any person providing information to support the registration in this state of an agricultural use pesticide in accordance with A.R.S. § 49-302(A).
4. "EPA" means the United States Environmental Protection Agency.
5. "Formulator" means any person who purchases an EPA-registered pesticide to reformulate or repackage and register the pesticide for sale in this state.
6. "Label" means the written, printed, or graphic matter on, or attached to, the pesticide container, and the outside container or wrapper of the retail package, if any, of the pesticide.
7. "Pest" means any weed, insect, vertebrate pest, nematode, fungus, virus, bacteria, or other pathogenic organism, or any other form of terrestrial or aquatic plant or animal life, except virus, bacteria, or other

microorganism on or in living humans or other living animals, that is declared a pest by the Director of the Arizona Department of Agriculture.

8. "Soil-applied" means an agricultural use pesticide intended for application to or injection into the soil by ground-based application equipment or chemigation, or the label of the pesticide requires or recommends that the application is followed within 72 hours by flood or furrow irrigation.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3). Amended by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-102. Agricultural Use Pesticide Submittal Requirements

- A. Pre-registration data requirements for new agricultural use pesticides.
 1. Before registering a new agricultural use pesticide under A.R.S. § 3-351, an applicant shall submit information that enables the Department to determine whether the new agricultural use pesticide has the potential to pollute groundwater in the state. This information shall include:
 - a. A transmittal letter;
 - b. The following information on a Data Summary form obtained from the Department:
 - i. The company name and address;
 - ii. The name and contact information of the person making the submittal;
 - iii. The date of filing;
 - iv. The product information, including the brand name, EPA registration number, formulation category, and intended use; and
 - v. The active ingredient technical name, Chemical Abstract Service (CAS) number, common name, molecular weight, and bulk density; and
 - c. The following information for each active ingredient:
 - i. Water solubility;
 - ii. Vapor pressure;
 - iii. Octanol-water partition coefficient;
 - iv. Soil adsorption coefficient;
 - v. Henry's law constant;
 - vi. Dissipation studies, including hydrolysis, photolysis, aerobic and anaerobic soil metabolism, and field dissipation, performed under conditions in Arizona, or similar environmental and use conditions, if that information exists in studies and conclusions from other states or the United States government. The studies shall, at a minimum, meet EPA testing methods and reporting guidelines.
 2. The applicant may submit the following alternate information:
 - a. Upon Director approval, alternate information to satisfy one or more of the data requirements in subsection (A)(1)(c). The alternate information shall

accurately describe the relevant data required for each new agricultural use pesticide active ingredient under conditions in Arizona or under similar environmental and use conditions;

- b. California registration.
 - i. Evidence that the California Department of Food and Agriculture registered the agricultural use pesticide following the data requirements under California Food and Agricultural Code Section 13143; and
 - ii. Documentation showing that required studies were performed under environmental and use conditions that are similar to those conditions in Arizona.

3. Waiver. The Director may waive some or all of the information required in subsection (A)(1)(c) if the applicant demonstrates that:

- a. Due to the nature of the active ingredient, it is not scientifically possible to obtain meaningful results for the specified tests; or
- b. Due to the application or cultural practices for the active ingredient, it is not necessary to obtain some or all of the information.

B. Pre-registration data submittal completeness.

- 1. The Department shall notify the Arizona Department of Agriculture when the applicant submits all the information on the active ingredient required under subsection (A) and the Director has concluded that the information is sufficient to determine whether the active ingredient has the potential to pollute groundwater of the state.
- 2. If the Director cannot determine that the data submittal requirements for agricultural use registration in Arizona have been met, the person may apply for a conditional registration under A.R.S. § 49-310.

C. Information submittal for the product chemistry and environmental fate assessment evaluation. After satisfying the data submittal required in subsection (A) and registering the pesticide with the Arizona Department of Agriculture:

- 1. A registrant may prepare an assessment of the product chemistry and environmental fate parameters for the Department to evaluate the potential for a new agricultural use pesticide to pollute groundwater. The assessment shall include:
 - a. Patterns for using the agricultural use pesticide in Arizona;
 - b. Cultural practices for those areas within Arizona where the agricultural use pesticide is intended for use;
 - c. Geological and meteorological conditions of the regions within Arizona where the agricultural use pesticide is intended for use; and
 - d. Any other information the Director determines is necessary to support the assessment.
- 2. A registrant may submit any of the following information if it is directly relevant to the agricultural use pesticide active ingredient evaluation:
 - a. Relevant scientific data and summaries, including those submitted to or required by federal and state agencies that further support the studies required in R18-6-102(A)(1)(c);
 - b. Relevant evaluations and conclusions by federal and state agencies, including evaluations of the studies required in R18-6-102(A)(1)(c);

- c. Documentation that addresses whether the studies required in R18-6-102(A)(1)(c) were performed under environmental and use conditions that are similar to those in Arizona.

D. If new information is available about the active ingredient of an agricultural use pesticide currently registered by the Arizona Department of Agriculture, the Director may require the registrant to submit the new information to the Director to assess whether the information is relevant to the Director's determination under subsection (B)(1).

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3). Section repealed; new Section made by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-103. Agricultural Use Active Ingredient Evaluation

For each new or existing agricultural use pesticide registered in Arizona, the Director shall determine whether each active ingredient has the potential to pollute groundwater in the state. The Director shall either:

- 1. Base the evaluation on the information submitted in accordance with R18-6-102(A) to determine whether the active ingredient fails any of the following mobility factors and one or more of the following persistence factors; or

SPECIFIC NUMERIC VALUES

<u>MOBILITY FACTORS</u>	<u>PERSISTENCE FACTORS</u>
Water solubility	No greater than 30 ppm
Soil adsorption coefficient	K _d no less than 5
Hydrolysis	Half-life no greater than 25 weeks
Aerobic soil metabolism	Half-life no greater than 3 weeks
Anaerobic soil metabolism	Half-life no greater than 3 weeks
Field dissipation	Half-life no greater than 3 weeks

- 2. Base the evaluation on the product chemistry and environmental fate assessment submitted in accordance with R18-6-102(C).

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-104. Monitoring and Testing

- A.** The Director shall conduct soil and groundwater monitoring for active ingredients contained in agricultural use pesticides placed upon the Groundwater Protection List as required under A.R.S. § 49-307(A). The Department may conduct soil and groundwater monitoring for other specified ingredients or degradation products based on active ingredient test results or other information about the pesticide.
- B.** The Director shall use the results of soil and groundwater monitoring and testing after considering the factors in A.R.S. §§ 49-307(C) to make the determination in 49-308(A) and 49-309(A), (B), or (D).
- C.** If the Director determines that an agricultural use pesticide meets the criteria or conditions specified in A.R.S. § 49-308(A), the Director shall notify the registrant in writing.

Department of Environmental Quality - Pesticides and Water Pollution Control

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-105. Repealed**Historical Note**

Adopted effective May 10, 1988 (Supp. 88-2). Section repealed by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-106. Informational Requirements for a Pesticide Formulator

- A. A pesticide formulator may rely upon the data generated by another person to meet the requirements in R18-6-102. The pesticide formulator shall submit, to the Department, the name of every person who is a source of each agricultural use pesticide active ingredient.
- B. The Department shall request that each person identified under subsection (A) verify within 30 days, in writing, whether the person provides the pesticide formulator with the active ingredient in question.
- C. If a person advises the Department that the person is not a source for the active ingredient used by the pesticide formulator or if the person does not respond under subsection (B), the Department shall notify the pesticide formulator of that fact and shall require the pesticide formulator to provide either of the following documents attesting to a business relationship involving the active ingredient in question:
 - 1. A signed contract, or
 - 2. Any other documentation of a business arrangement, endorsed by each party.
- D. If the pesticide formulator does not produce acceptable documentation of a business relationship under subsection (C) or if a person identified by the pesticide formulator is not a data generator for the active ingredient in question, the Director shall find that a groundwater protection data gap exists for the agricultural use pesticide, and the formulator is subject to the provisions in A.R.S. § 49-304.
- E. Any pesticide formulator who relies on data submitted by a person identified as a source under subsection (A) shall notify the Department of any change in the source within 60 days of a similar notification to the EPA.

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3). Amended by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

ARTICLE 2. PESTICIDE CONTAMINATION PREVENTION**R18-6-201. Repealed****Historical Note**

Adopted effective August 27, 1987 (Supp. 87-3). Repealed effective September 23, 1992 (Supp. 92-3).

ARTICLE 3. GROUNDWATER PROTECTION LIST**R18-6-301. Groundwater Protection List**

- A. Groundwater Protection List. The Director shall, using an evaluation process specified in R18-6-103 and the addition and deletion criteria specified in subsections (B) and (C), annually develop and maintain a list of agricultural use pesticides that have the potential to pollute groundwater.
 - 1. The Department shall publish the proposed Groundwater Protection List in the *Arizona Administrative Register* and accept written comments from the public.

- 2. The written public comment period begins on the publication date of the list and extends for 30 calendar days.
- 3. The Department shall publish the final Groundwater Protection List each year in the *Arizona Administrative Register* on or before July 1. The list is effective on December 1 of the publication year.
- B. Adding an agricultural use pesticide. The Director shall add an agricultural use pesticide to the Groundwater Protection List for any of the following reasons:
 - 1. An agricultural use pesticide active ingredient is identified under R18-6-103 as having the potential to pollute groundwater;
 - 2. An agricultural use pesticide active ingredient is detected in Arizona consistent with the testing requirements of R18-6-104 and is found:
 - a. At or below the deepest of the following depths:
 - i. Eight feet below the soil surface, or
 - ii. Below the root zone of the crop where the active ingredient was found;
 - b. In the groundwater of this state;
 - 3. An agricultural use pesticide degradation product or other specified ingredient that poses a threat to public health has been found under the conditions described in subsection (B)(2).
- C. Deleting an agricultural use pesticide. The Director shall delete an agricultural use pesticide from the Groundwater Protection List under any of the following circumstances:
 - 1. The results of monitoring and testing conducted by the Department, a government agency, or other reliable source establish that the active ingredient has not been detected in Arizona under the conditions described in subsection (B)(2).
 - 2. The Director no longer considers the agricultural use pesticide to have the potential to pollute groundwater in Arizona based on:
 - a. A change in a specific numeric value established in R18-6-103(1),
 - b. A revision in the specific numeric values established by new research studies or new procedures, or
 - c. The results of the evaluation under R18-6-103(2).
 - 3. Agricultural use pesticide registration cancellation. The Arizona Department of Agriculture no longer registers the agricultural use pesticide under A.R.S. § 3-351(I).
- D. Pesticide review. Any person may request that the Director add or delete an agricultural use pesticide from the Groundwater Protection List by submitting an explanation of the request to the Department with studies and conclusions of support.
 - 1. The Director shall notify the registrant in writing after receiving a request to add or delete an agricultural use pesticide from the Groundwater Protection List and again upon making the determination.
 - 2. The Director shall consider whether the supporting documentation:
 - a. Is based upon procedures consistent with those described in R18-6-104 and A.R.S. Title 49, Chapter 2, Article 6; and
 - b. Justifies the addition or deletion of the agricultural use pesticide from the Groundwater Protection List.
 - 3. Director determination.
 - a. If the Director determines that the agricultural use pesticide has the potential to pollute groundwater, the Director shall add the pesticide to, or retain the pesticide on, the Groundwater Protection List.

- b. If the Director determines that the agricultural use pesticide does not have the potential to pollute groundwater, the Director shall, if the pesticide is on the Groundwater Protection List, delete it from the list.
- E. Reevaluation of an agricultural use pesticide. A registrant may request that the Director reevaluate whether an agricultural use pesticide placed on the Groundwater Protection List before [effective date of this Section] that has the potential to pollute groundwater in Arizona. The registrant shall submit the written request before December 1, 2005 and include the assessment and supporting documentation specified in R18-6-102(C).
1. The Director shall not accept a request to reevaluate an agricultural use pesticide if:
 - a. An active ingredient has been detected in Arizona using the testing criteria in R18-6-104 and is found under conditions described in subsection (B)(2); or
 - b. An agricultural use pesticide degradation product or other specified ingredient relating to the agricultural use pesticide has been detected in Arizona consistent with the criteria in R18-6-104 and the agricultural use pesticide degradation product or other specified ingredient poses a threat to public health and has been found under the conditions described in subsection (B)(2);
 2. Director determination.
 - a. If the Director determines that the agricultural use pesticide has the potential to pollute groundwater, the pesticide shall remain on the Groundwater Protection List.
 - b. If the Director determines that the agricultural use pesticide does not have the potential to pollute groundwater, the Director shall delete the pesticide from the Groundwater Protection List.

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3).
Amended by final rulemaking at 11 A.A.R. 3949,
effective November 22, 2005 (Supp. 05-3).

R18-6-302. Findings and Determinations

- A. If the Director discovers or becomes aware of the illegal sale or use of any agricultural use pesticide on the Groundwater Protection List, the Director shall report the sale or use to the appropriate regulatory agency and to the Office of the Attorney General.
- B. If the Director finds that an active ingredient, degradation product, or other specified ingredient of an agricultural use pesticide has been detected under the conditions specified in R18-6-104, the Director shall refer these findings to the state or federal agency responsible for further investigation and enforcement.

- C. If the Director discovers a site that demonstrates pesticide contamination, the Director shall determine whether remedial action is required under A.R.S. Title 49, Chapter 2, Article 5.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3). Amended by final rulemaking at 11 A.A.R. 3949, effective November 22, 2005 (Supp. 05-3).

R18-6-303. Requirements for an Agricultural Use Pesticide on the Groundwater Protection List

- A. Any person who causes another person to soil-apply an agricultural use pesticide on the Groundwater Protection List shall implement Best Management Practices to reduce or prevent the pollution of groundwater. In implementing the Best Management Practices, the person shall consider the following factors:
1. Application site characteristics, including soil texture, slope, organic matter, and depth to groundwater to determine site susceptibility. The person shall consider:
 - a. Selecting a pesticide based on the intended application site characteristics;
 - b. Minimizing or avoiding the use of any pesticide with high leaching or high runoff potential;
 - c. Incorporating erosion control practices to minimize runoff; and
 - d. Using an alternative pest control method, if practical.
 2. Protection of water resources from potential contamination during mixing, loading, or application. The person shall consider:
 - a. Applying the correct amount of pesticide according to the label and employ methods that avoid overspray or drift;
 - b. Weather patterns, soil moisture, and crop needs before pesticide application; and
 - c. Maintaining buffer zones, where applicable.
- B. The Director shall annually obtain the following information from the Arizona Department of Agriculture for each agricultural use pesticide on the Groundwater Protection List that is soil-applied:
1. The pest condition that the agricultural use pesticide will control;
 2. The name of the crop and number of acres to which the agricultural use pesticide has been applied;
 3. The location of use including the county, township, range, and section;
 4. The name of the product used, including the EPA registration number; and
 5. The amount of agricultural use pesticide applied per acre.

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3).
Amended by final rulemaking at 11 A.A.R. 3949,
effective November 22, 2005 (Supp. 05-3).