FACT SHEET

DRAFT GUIDELINES FOR CLASSIFYING GROUND WATER

In August, 1984, the U.S. Environmental Protection Agency (2020) issued a Ground-Water Protection Strategy, setting out the Agency's plans for enhancing ground-water protection efforts by EPA and the States. A central feature of the Strategy is a policy framework for EPA's programs which accords differing levels of protection to ground water based on its use, value to society, and vulnerability to contamination.

Dividing ground water into three classes, the policy provides an extra degree of protection to ground water that is highly vulnerable to contamination and of great value because of its importance as a source of drinking water or its contribution to a unique ecological habitat (Class I). The vast majority of the nation's ground water is in Class II, a current or potential source of drinking water, and it is for this ground water that basic EPA ground-water protection requirements are designed. Class III ground water is not a potential source of drinking water due to levels of contamination from naturally occurring conditions or the effects of broadscale human activity that cannot be feasibly cleaned up.

As an initial step in carrying out this policy, the Agency has developed draft Guidelines for classifying ground water which:

- o Further define the classes, concepts, and key terms related to the classification system outlined in the Ground-Water Protection Strategy, and
- o Describe the procedures and information needs for classifying ground water.

The procedures in the draft Guidelines address classification of the segment of ground water near a particular source that is most likely to be affected should a release occur, generally defined as ground water within a two-mile radius of the source. While the specific procedures are not designed for broader aquifer classification, many of the concepts and procedures developed for site-by-site classification will also be useful in such classification efforts.

The draft Guidelines set out EPA's policy choices regarding ground-water classification, but the manner and extent to which the Guidelines will be incorporated into EPA regulatory, permitting, and planning decisions will be determined on a program-by-program basis. The Guidelines are not enforceable in particular EPA programs until legally incorporated by program guidance, regulations, or other appropriate means. Where States have delegated authority to administer an EPA program that incorporates the classification Guidelines in its decision-making procedures, States will be required to use either the Guidelines or another method resulting in equivalent or higher class designations for ground water.

SUMMARY OF THE DRAFT GUIDELINES

Following is a summary of the key criteria for each class and procedural approaches for determining whether the criteria are met.

Classification Review Area (CRA)

The first step in making a classification decision is defining the area around the source that should be evaluated. Once this Classification-Review Area (CRA) has been delineated, information regarding public and private wells, demographics, hydrogeology, and surface water and wetlands is collected and a classification decision is made based on the criteria for each class as described below.

The Guidelines specify an initial CRA as the area within a two-mile radius of the boundary of the facility or activity under review. Under certain hydrogeologic conditions an expanded or reduced CRA is allowed.

Class I - Special Ground Water

Class I ground waters are defined as resources of particularly high value. They are <u>highly vulnerable</u> and either an <u>irreplaceable</u> source of drinking water or ecologically vital.

- o <u>Highly vulnerable</u> ground water is characterized by a relatively high potential for contaminants to enter and/or be transported within the ground-water flow system. The draft Guidelines provide two options for determining vulnerability based on hydrogeologic factors. Option A uses a standard numerical ranking system known as DRASTIC, with numerical cutoff points. Option B relies on a qualitative "best professional judgement" approach which could include use of numerical or alternative techniques.
- o An <u>irreplaceable source of drinking water</u> is ground water that serves a substantial population and replacement by water of comparable quality and quantity from alternative sources in the area would be economically infeasible or precluded by institutional barriers. There are two options for judging irreplaceability. Option A relies on a standard methodology using one or more numeric cutoff values for size of population served and economic feasibility. Option B is a qualitative "best professional judgement" approach which could include use of quantitative approaches as part of the assessment.
- <u>Ecologically vital</u> ground water supplies a sensitive ecological system located in a ground-water discharge area that supports a unique habitat. Unique habitats include habitats for endangered species listed or proposed for listing under the Endangered Species Act as well as certain Federally managed and protected lands.

Class II - Current and Potential Sources of Drinking Water and Ground Water Having Other Beneficial Uses

Class II ground waters include all non-Class I ground water that is currently used or is potentially available for drinking water or other beneficial use.

Subclass IIA is a current source of drinking water. Ground water is classified as IIA if within the CRA there is either (1) one or more operating drinking water wells or springs, or (2) a water supply reservoir watershed or portion that is designated for water quality protection by either a State or locality.

Subclass IIB is a potential source of drinking water. This ground water (1) can be obtained in sufficient quantity to meet the needs of an average family (i.e., 150 gallons per day); (2) has total dissolved solids (TDS) of less than 10,000 milligrams per liter (mg/l); and (3) is of a quality that can be used without treatment or that can be treated using methods reasonably employed by public water systems.

Class III - Ground Water Not a Potential Source of Drinking Water and of Limited Beneficial Use

Class III ground waters have either (1) a TDS concentration of over 10,000 mg/l; or (2) contamination by naturally occurring conditions or by the effects of broadscale human activity that cannot be cleaned up using treatment methods reasonably employed in public water systems. Technology-based and economics-based tests for reasonably employed treatment methods are presented in the Guidelines.

Subclass IIIA ground water has a high to intermediate degree of connection with adjacent ground water of a higher class or with surface water.

Subclass IIIB ground water has a low degree of connection with adjacent surface waters or ground waters of a higher class.

FOR MORE INFORMATION

Copies of the full draft Guidelines for Classifying Ground Water (over 350 pages) and a shorter technical summary can be obtained by sending a written request to:

> Office of Ground-Water Protection U.S. Environmental Protection Agency, WH-550G Washington, D.C. 20460

Comments on the draft Guidelines must be postmarked and sent to the above address by no later than February 8, 1987.

nematocide/insect/cide ethoprop (Oethyl S.S-dipropyl phosphorodithioate) in or on brussels sprouts at 0.02 ppm.

Rhone-Poulenc, Inc. has amended the petition by increasing the tolerance level to 0.05 ppm. The proposed analytical method for determining residues is ges chromatographic procedure using a phospherous flame photometric. detector. (PM-18).

6. PP 7F3470. Ciba-Geigy Corp., P.O. Box 18307, Greensboro, NC 27419. Proposes to amend 40 CFR 180.408 by establishing tolerances for the combined residuas of the fungicide metalaxy! [N-(2.6-dimethylphenyl]-N-(methoxyacetyl) alanine methyl ester; and its metabolites containing the 2.6 dimethylanifine moeity, and N-(2hydroxymethyi-6-methylohenyl]-N-(methoxyacetyl) alanine methyl ester in or on the commodities bineberries at 2.0 ppm. stone fruits at 1.0 ppm, wainuts and almonds at 0.5 ppm, and almond hulls at 5.0 ppm. The proposed analytical method for determining residues is gas chromatography. (PM-21).

7. PAP 7H3532 Ciba-Geigy Corp. Proposes amending 21 CFR 193.277 by establishing a regulation permitting the combined residues of metalaxyl and its metabolites in or on dried apricots and prunes at 4.0 ppm resulting from application of metalaxyl to the growing crop. (PM-21).

8. PP 7.P3472. Ferments Plant Protection Ca., P.O. Box 348, Painesville, Oif 44077. Proposes amending 40 CFR 180.275 by establishing a tolerance for the combined residues of the fungicide chlorothalonii ((2,4,5,6tetrachloroinophthalonizile); and its metabolits, 4-kydrexy-2,50-

trichloroisopthalonitrile in or on pecans at 0.02 ppm. The proposed analytical method for determining residues is gas chromatography. (PM-21).

10. PP 7F3472 Brea Agricultural Service, Inc., Stockton, CA by Delta Management Group, Fenwick Professional Park, 1414 Fenwick Lane, Silver Spring, MD 20910, Proposes amending 40 CFR Part 180 by establishing an exemption from the requirement of a tolerance for residues of the plant growth regulator hydroxypropanoic acid in or on all raw agricultural commodities. The proposed analytical method for determining residues is titration using the USP XXI procedure. (PM-25).

Authority: 21 U.S.C. 346a and 21 U.S.C. 348. Dated: November 24, 1988.

Edwin F. Tinsworth,

Director, Registration Division, Office of Pesticide Programs. (FR Doc. 88–27038 Filed 12–2–88; 8:45 am)

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[FRL-3122-5]

Guidelines for Ground-Water Classification Under the EPA Ground-Water Protection Strategy

AGENCY: Environmental Protection Agency.

ACTION: Notice of availability of draft document for public comment.

summary: The Environmental Protection Agency (EPA) announces the availability for public review and comment of draft "Guidelines for Ground-Water Classification under the **EPA Ground-Water Protection** Strategy." The purpose of this document is two-fold: (1) To further define the classes, concepts and key terms related to the ground-water classification system outlined in the Ground-Water Protection Strategy (August, 1984). and (2) to describe the procedures and information needs for classifying ground water. These Guidelines are not enforceable in particular EPA programs until legally incorporated by program guidance, regulations or other appropriate means.

DATES: The document will be available for public comment on or about December 10, 1988. Comments must be received by February 6, 1987 or postmarked on that date.

ADORESSES: Those persons interested in obtaining a copy of either the full, 400page document or only the shorter executive summary will be able to do so as follows:

(1) Single copies will be available from PPA at the following address: Office of Ground-Water Protection, U.S. Environmental Protection Agency, 401 M St. SW. (WH-550C), Washington, DC 20460. To receive a copy, requesters should send their names and addresses to the Office of Ground-Water Protection at this time.

(2) Copies will also be available for public inspection at the Public Reference Unit, U.S. Environmental Protection Agency, Room M2404, 401 M St., SW., Washington, DC 20480, and at all ten of the EPA Regional Office Libraries during their operating hours.

Individuals desiring to make comments on this document must submit their written comments no later than February 8, 1987 to: Project Officer Ground-Water Classification Guidelines, Office of Ground-Water Protection, U.S. Environmental Protection Agency, 401 M St., SW. (WH-550G), Washington, DC 20460. Comments will not be accepted unless they are submitted in this manner.

FOR FURTHER INFORMATION CONTACT: Jose Valdes, Office of Ground-Water Protection, U.S. Environmental Protection Agency, 401 M St., SW. (WH-550G), Washington, DC 20480; 202/382-7077 or FTS: 382-7077.

SUPPLEMENTARY INFORMATION: In August 1984, EPA issued its Ground-Water Protection Strategy to provide clear objectives to guide the Agency's ground-water protection efforts and ensure consistency among related programs. The strategy established a ground water classification system based on the policy that, depending on their value to society, use and vulnerability to contamination, different ground waters merit different levels of protection. The following classes of ground water were established:

Class I—Special ground water.
Class II—Ground water currently or

potentially a source of drinking water. • Class III-Ground water not a current or potential source of drinking water.

Pursuant to the goals of the Strategy. the purpose of the Ground-Water Classification Guidelines are to: (1) Further define the classes, concepts and key terms outlined in the Strategy, and (2) to describe the procedures and data requirements for performing ground water classifications. Although comments on all aspects of the document are being sought, two options are specifically presented for public comment regarding the definition of each of three Class I terms: "highly vulnerable," "substantial population" and "economically infeasible." Public comments on the options presented will be considered by the Agency in determining how best to incorporate these parameters in classification decisions.

It is important to note that the Guidelines are not enforceable in particular EPA programs until legally incorporated by program guidance, regulations, or other appropriate means. Interested individuals may wish to provide their ideas on appropriate means to incorporate the guidelines in EPA actions.

Dated: November 25, 1986.

Lawrence J. Jensen,

Assistant Administator for Water. IFP Dan 98-27140 Filed 12-7 98 845 aml

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