APPENDIX F.1

Federal Regulations on Acute Toxicity U.S. Environmental Protection Agency (EPA)

U.S. EPA Classification and Labeling Regulations

40 CFR Ch.I 156.10: General Provisions – Labeling Requirements

40 CFR Ch.I 159.165: Toxicological and Ecological Studies

Subpart A—General Provisions

§156.10 Labeling requirements.

- (a) General—(1) Contents of the label. Every pesticide products shall bear a label containing the information specified by the Act and the regulations in this part. The contents of a label must show clearly and prominently the following:
- (i) The name, brand, or trademark under which the product is sold as prescribed in paragraph (b) of this section;
- (ii) The name and address of the producer, registrant, or person for whom produced as prescribed in paragraph (c) of this section;
- (iii) The net contents as prescribed in paragraph (d) of this section;
- (iv) The product registration number as prescribed in paragraph (e) of this section:
- (v) The producing establishment number as prescribed in paragraph (f) of this section;
- (vi) An ingredient statement as prescribed in paragraph (g) of this section;
- (vii) Warning or precautionary statements as prescribed in paragraph (h) of this section;
- (viii) The directions for use as prescribed in paragraph (i) of this section; and
- (ix) The use classification(s) as prescribed in paragraph (j) of this section.
- (2) Prominence and legibility. (i) All words, statements, graphic representations, designs or other information required on the labeling by the Act or the regulations in this part must be clearly legible to a person with normal vision, and must be placed with such conspicuousness (as compared with other words, statements, designs, or graphic matter on the labeling) and expressed in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use.
 - (ii) All required label text must:
 - (A) Be set in 6-point or larger type;
- (B) Appear on a clear contrasting background; and
 - (C) Not be obscured or crowded.
- (3) Language to be used. All required label or labeling text shall appear in the English language. However, the Agency may require or the applicant may propose additional text in other

- languages as is considered necessary to protect the public. When additional text in another language is necessary, all labeling requirements will be applied equally to both the English and other-language versions of the labeling.
- (4) Placement of Label—(i) General. The label shall appear on or be securely attached to the immediate container of the pesticide product. For purposes of this section, and the misbranding provisions of the Act, "securely attached" shall mean that a label can reasonably be expected to remain affixed during the foreseeable conditions and period of use. If the immediate container is enclosed within a wrapper or outside container through which the label cannot be clearly read, the label must also be securely attached to such outside wrapper or container, if it is a part of the package as customarily distributed or sold.
- (ii) Tank cars and other bulk containers—(A) Transportation. While a pesticide product is in transit, the appropriate provisions of 49 CFR parts 170-189, concerning the transportation of hazardous materials, and specifically those provisions concerning the labeling, marking and placarding of hazardous materials and the vehicles carrying them, define the basic Federal requirements. In addition, when any registered pesticide product is transported in a tank car, tank truck or other mobile or portable bulk container, a copy of the accepted label must be attached to the shipping papers, and left with the consignee at the time of delivery.
- (B) Storage. When pesticide products are stored in bulk containers, whether mobile or stationary, which remain in the custody of the user, a copy of the label of labeling, including all appropriate directions for use, shall be securely attached to the container in the immediate vicinity of the discharge control valve.
- (5) False or misleading statements. Pursuant to section 2(q)(1)(A) of the Act, a pesticide or a device declared subject to the Act pursuant to §152.500, is misbranded if its labeling is false or misleading in any particular including both pesticidal and non-pesticidal

claims. Examples of statements or representations in the labeling which constitute misbranding include:

- (i) A false or misleading statement concerning the composition of the product:
- (ii) A false or misleading statement concerning the effectiveness of the product as a pesticide or device;
- (iii) A false or misleading statement about the value of the product for purposes other than as a pesticide or device:
- (iv) A false or misleading comparison with other pesticides or devices;
- (v) Any statement directly or indirectly implying that the pesticide or device is recommended or endorsed by any agency of the Federal Government:
- (vi) The name of a pesticide which contains two or more principal active ingredients if the name suggests one or more but not all such principal active ingredients even though the names of the other ingredients are stated elsewhere in the labeling;
- (vii) A true statement used in such a way as to give a false or misleading impression to the purchaser;
- (viii) Label disclaimers which negate or detract from labeling statements required under the Act and these regulations:
- (ix) Claims as to the safety of the pesticide or its ingredients, including statements such as "safe," "nonpoisonous," "noninjurious," "harmless" or "nontoxic to humans and pets" with or without such a qualifying phrase as "when used as directed"; and
- (x) Non-numerical and/or comparative statements on the safety of the product, including but not limited to:
- (A) "Contains all natural ingredients":
- (B) "Among the least toxic chemicals known"
 - (C) "Pollution approved"
- (6) Final printed labeling. (i) Except as provided in paragraph (a)(6)(ii) of this section, final printed labeling must be submitted and accepted prior to registration. However, final printed labeling need not be submitted until draft label texts have been provisionally accepted by the Agency.
- (ii) Clearly legible reproductions or photo reductions will be accepted for unusual labels such as those silk-

- screened directly onto glass or metal containers or large bag or drum labels. Such reproductions must be of microfilm reproduction quality.
- (b) Name, brand, or trademark. (1) The name, brand, or trademark under which the pesticide product is sold shall appear on the front panel of the label.
- (2) No name, brand, or trademark may appear on the label which:
 - (i) Is false or misleading, or
- (ii) Has not been approved by the Administrator through registration or supplemental registration as an additional name pursuant to §152.132.
- (c) Name and address of producer, registrant, or person for whom produced. An unqualified name and address given on the label shall be considered as the name and address of the producer. If the registrant's name appears on the label and the registrant is not the producer, or if the name of the person for whom the pesticide was produced appears on the label, it must be qualified by appropriate wording such as "Packed for * * *," "Distributed by * * *," or "Sold by * * *" to show that the name is not that of the producer.
- (d) Net weight or measure of contents.
 (1) The net weight or measure of content shall be exclusive of wrappers or other materials and shall be the average content unless explicitly stated as a minimum quantity.
- (2) If the pesticide is a liquid, the net content statement shall be in terms of liquid measure at 68 °F (20 °C) and shall be expressed in conventional American units of fluid ounces, pints, quarts, and gallons.
- (3) If the pesticide is solid or semisolid, viscous or pressurized, or is a mixture of liquid and solid, the net content statement shall be in terms of weight expressed as avoirdupois pounds and ounces.
- (4) In all cases, net content shall be stated in terms of the largest suitable units, i.e., "1 pound 10 ounces" rather than "26 ounces."
- (5) In addition to the required units specified, net content may be expressed in metric units.
- (6) Variation above minimum content or around an average is permissible only to the extent that it represents

deviation unavoidable in good manufacturing practice. Variation below a stated minimum is not permitted. In no case shall the average content of the packages in a shipment fall below the stated average content.

(e) Product registration number. The registration number assigned to the pesticide product at the time of registration shall appear on the label, preceded by the phrase "EPA Registration No.," or the phrase "EPA Reg. No." The registration number shall be set in type of a size and style similar to other print on that part of the label on which it appears and shall run parallel to it. The registration number and the required identifying phrase shall not appear in such a manner as to suggest or imply recommendation or endorsement of the product by the Agency.

(f) Producing establishments registration number. The producing establishment registration number preceded by the phrase "EPA Est.", of the final establishment at which the product was produced may appear in any suitable location on the label or immediate container. It must appear on the wrapper or outside container of the package if the EPA establishment registration number on the immediate container cannot be clearly read through such wrapper or container.

(g) Ingredient statement—(1) General. The label of each pesticide product must bear a statement which contains the name and percentage by weight of each active ingredient, the total percentage by weight of all inert ingredients; and if the pesticide contains arsenic in any form, a statement of the percentages of total and water-soluble arsenic calculated as elemental arsenic. The active ingredients must be designated by the term "active ingredients" and the inert ingredients by the term "inert ingredients," or the singular forms of these terms when appropriate. Both terms shall be in the same type size, be aligned to the same margin and be equally prominent. The statement "Inert Ingredients, none" is not required for pesticides which contain 100 percent active ingredients. Unless the ingredient statement is a complete analysis of the pesticide, the term "analysis" shall not be used as a heading for the ingredient statement.

(2) Position of ingredient statement. (i) The ingredient statement is normally required on the front panel of the label. If there is an outside container or wrapper through which the ingredient statement cannot be clearly read, the ingredient statement must also appear on such outside container or wrapper. If the size or form of the package makes it impracticable to place the ingredient statement on the front panel of the label, permission may be granted for the ingredient statement to appear elsewhere.

(ii) The text of the ingredient statement must run parallel with other text on the panel on which it appears, and must be clearly distinguishable from and must not be placed in the body of other text.

(3) Names to be used in ingredient statement. The name used for each ingredient shall be the accepted common name, if there is one, followed by the chemical name. The common name may be used alone only if it is well known. If no common name has been established, the chemical name alone shall be used. In no case will the use of a trademark or proprietary name be permitted unless such name has been accepted as a common name by the Administrator under the authority of section 25(c)(6).

(4) Statements of percentages. The percentages of ingredients shall be stated in terms of weight-to-weight. The sum of percentages of the active and the inert ingredients shall be 100. Percentages shall not be expressed by a range of values such as "22-25%." If the uses of the pesticide product are expressed as weight of active ingredient per unit area, a statement of the weight of active ingredient per unit volume of the pesticide formulation shall also appear in the ingredient statement.

(5) Accuracy of stated percentages. The percentages given shall be as precise as possible reflecting good manufacturing practice. If there may be unavoidable variation between manufacturing batches, the value stated for each active ingredient shall be the lowest per-

centage which may be present.

(6) Deterioration. Pesticides which change in chemical composition significantly must meet the following labeling requirements:

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- (i) In cases where it is determined that a pesticide formulation changes chemical composition significantly, the product must bear the following statement in a prominent position on the label: "Not for sale or use after [date]."
- (ii) The product must meet all label claims up to the expiration time indicated on the label.
- (7) Inert ingredients. The Administrator may require the name of any inert ingredient(s) to be listed in the ingredient statement if he determines that such ingredient(s) may pose a hazard to man or the environment.
- (h) Warnings and precautionary statements. Required warnings and precautionary statements concerning the

general areas of toxicological hazard including hazard to children, environmental hazard, and physical or chemical hazard fall into two groups; those required on the front panel of the labeling and those which may appear elsewhere. Specific requirements concerning content, placement, type size, and prominence are given below.

(1) Required front panel statements. With the exception of the child hazard warning statement, the text required on the front panel of the label is determined by the Toxicity Category of the pesticide. The category is assigned on the basis of the highest hazard shown by any of the indicators in the table below:

Hazard indicators	Toxicity categories				
	I	11	III	IV	
Oral LD ₅₀	Up to and including 50 mg/kg.	From 50 thru 500 mg/kg	From 500 thru 5000 mg/ kg.	Greater than 5000 mg/kg.	
Inhalation LC $_{50}$	Up to and including .2 mg/liter.	From .2 thru 2 mg/liter	From 2. thru 20 mg/liter	Greater than 20 mg/liter.	
Dermal LD 50	Up to and including 200 mg/kg.	From 200 thru 2000	From 2,000 thru 20,000	Greater than 20,000.	
Eye effects	Corrosive; corneal opacity not reversible within 7 days.	Corneal opacity revers- ible within 7 days; irri- tation persisting for 7 days.	No corneal opacity; irritation reversible within 7 days.	No irritation.	
Skin effects	Corrosive	Severe irritation at 72 hours.	Moderate irritation at 72 hours.	Mild or slight irritation at 72 hours.	

- (i) Human hazard signal word—(A) Toxicity Category I. All pesticide products meeting the criteria of Toxicity Category I shall bear on the front panel the signal word "Danger." In addition if the product was assigned to Toxicity Category I on the basis of its oral, inhalation or dermal toxicity (as distinct from skin and eye local effects) the word "Poison" shall appear in red on a background of distinctly contrasting color and the skull and crossbones shall appear in immediate proximity to the word "poison."
- (B) *Toxicity Category II.* All pesticide products meeting the criteria of Toxicity Category II shall bear on the front panel the signal word "Warning."
- (C) Toxicity Category III. All pesticide products meeting the criteria of Toxicity Category III shall bear on the front panel the signal word "Caution."
- (D) *Toxicity Category IV.* All pesticide products meeting the criteria of Tox-

icity Category IV shall bear on the front panel the signal word "Caution."

- (E) *Use of signal words.* Use of any signal word(s) associated with a higher Toxicity Category is not permitted except when the Agency determines that such labeling is necessary to prevent unreasonable adverse effects on man or the environment. In no case shall more than one human hazard signal word appear on the front panel of a label.
- (ii) Child hazard warning. Every pesticide product label shall bear on the front panel the statement "keep out of reach of children." Only in cases where the likelihood of contact with children during distribution, marketing, storage or use is demonstrated by the applicant to be extremely remote, or if the nature of the pesticide is such that it is approved for use on infants or small children, may the Administrator waive this requirement.
- (iii) Statement of practical treatment—(A) Toxicity Category I. A statement of

practical treatment (first aid or other) shall appear on the front panel of the label of all pesticides falling into Toxicity Category I on the basis of oral, inhalation or dermal toxicity. The Agency may, however, permit reasonable variations in the placement of the statement of practical treatment is some reference such as "See statement of practical treatment on back panel" appears on the front panel near the word "Poison" and the skull and crossbones.

(B) Other toxicity categories. The statement of practical treatment is not required on the front panel except as described in paragraph (h)(1)(iii)(A) of this section. The applicant may, however, include such a front panel statement at his option. Statements of practical treatment are, however, required elsewhere on the label in accord with paragraph (h)(2) of this section if they do not appear on the front panel.

(iv) Placement and prominence. All the require front panel warning statements shall be grouped together on the label, and shall appear with sufficient prominence relative to other front panel text and graphic material to make them unlikely to be overlooked under customary conditions of purchase and use. The following table shows the minimum type size requirements for the front panel warning statements on various sizes of labels:

	Points	
Size of label front panel in square inches	Required signal word, all capitals	"Keep out of reach of children"
5 and under	6	6
Above 5 to 10	10	6
Above 10 to 15	12	8
Above 15 to 30	14	10
Over 30	18	12

(2) Other required warnings and precautionary statements. The warnings and precautionary statements as required below shall appear together on the label under the general heading "Precautionary Statements" and under appropriate subheadings of "Hazard to Humans and Domestic Animals," "Environmental Hazard" and "Physical or Chemical Hazard."

(i) Hazard to humans and domestic animals. (A) Where a hazard exists to humans or domestic animals, precautionary statements are required indicating the particular hazard, the route(s) of exposure and the precautions to be taken to avoid accident, injury or damage. The precautionary paragraph shall be immediately preceded by the appropriate hazard signal word

(B) The following table depicts typical precautionary statements. These statements must be modified or expanded to reflect specific hazards.

Toxicity cat- egory	Precautionary statements by toxicity category		
	Oral, inhalation, or dermal toxicity	Skin and eye local effects	
I	Fatal (poisonous) if swallowed [inhaled or absorbed through skin]. Do not breathe vapor [dust or spray mist]. Do not get in eyes, on skin, or on clothing [Front panel statement of practical treatment required.]. May be fatal if swallowed [inhaled or absorbed through		
	the skin]. Do not breathe vapors [dust or spray mist]. Do not get in eyes, on skin, or on clothing. [Appropriate first aid statements required.].	skin, or on clothing. Harmful if swallowed. [Appropriate first aid statement required.]	
III	Harmful if swallowed [inhaled or absorbed through the skin]. Avoid breathing vapors [dust or spray mist]. Avoid contact with skin [eyes or clothing]. [Appropriate first aid statement required.].	Avoid contact with skin, eyes or clothing. In case of contact immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.	
IV	[No precautionary statements required.]	[No precautionary statements required.]	

(ii) Environmental hazards. Where a hazard exists to non target organisms excluding humans and domestic animals, precautionary statements are required stating the nature of the hazard and the appropriate precautions to

avoid potential accident, injury or damage. Examples of the hazard statements and the circumstances under which they are required follow:

(A) If a pesticide intended for outdoor use contains an active ingredient with

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a mammalian acute oral LD_{50} of 100 or less, the statement "This Pesticide is Toxic to Wildlife" is required.

- (B) If a pesticide intended for outdoor use contains an active ingredient with a fish acute LC_{50} of 1 ppm or less, the statement "This Pesticide is Toxic to Fish" is required.
- (C) If a pesticide intended for outdoor use contains an active ingredient with an avian acute oral LD_{50} of 100 mg/kg or less, or a subacute dietary LC_{50} of 500 ppm or less, the statement "This Pesticide is Toxic to Wildlife" is required.
- (D) If either accident history or field studies demonstrate that use of the pesticide may result in fatality to birds, fish or mammals, the statement

"This pesticide is extremely toxic to wildlife (fish)" is required.

- (E) For uses involving foliar application to agricultural crops, forests, or shade trees, or for mosquito abatement treatments, pesticides toxic to pollinating insects must bear appropriate label cautions.
- (F) For all outdoor uses other than aquatic applications the label must bear the caution "Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes."
- (iii) Physical or chemical hazards. (A) Warning statements on the flammability or explosive characteristics of all pesticides are required as set out in Table 1 and Table 2 of this paragraph as follows:

TABLE 1—PRESSURIZED CONTAINERS

Flash Point	Required Text	
Flash point at or below 20 °F; if there is a flashback at any valve opening	Extremely flammable. Contents under pressure. Keep away from fire, sparks, and heated surfaces. Do not puncture or incinerate container. Exposure to temperatures above 130 °F may cause bursting	
Flash point above 20 °F and not over 80 °F or if the flame extension is more than 18 inches long at a distance of 6 inches from the flame	Flammable. Contents under pressure. Keep away from heat, sparks, and open flame. Do not puncture or incinerate container. Exposure to temperatures above 130 °F may cause bursting	
All other pressurized containers	Contents under pressure. Do not use or store near heat or open flame. Do not puncture or incinerate container. Exposure to temperatures above 130 °F may cause bursting.	
Table 2—Nonpress	SURIZED CONTAINERS	

Flash Point	Required Text	
At or below 20 °F	Extremely flammable. Keep away from fire, sparks, and heated surfaces.	
Above 20 °F and not over 80 °F	Flammable. Keep away from heat and open flame.	
Above 80 °F and not over 150 °F	Do not use or store near heat or open flame.	

(B) A "total release fogger" is defined as a pesticide product in a pressurized container designed to automatically release the total contents in one operation, for the purpose of creating a permeating fog within a confined space to deliver the pesticide throughout the space.

(C)(1) If the pesticide product is a total release fogger containing a propellant with a flash point at or below 20 °F, then the following special instructions must be added to the "Physical and Chemical Hazards" warning statement:

This product contains a highly flammable ingredient. It may cause a fire or explosion if not used properly. Follow the "Directions for Use" on this label very carefully.

(2) A graphic symbol depicting fire such as illustrated in this paragraph or an equivalent symbol, must be displayed along with the required language adjoining the "Physical and Chemical Hazards" warning statement. The graphic symbol must be no smaller than twice the size of the first character of the human hazard signal word.



Highly Flammable Ingredient Ingrediente Altamente Inflamable

- (i) Directions for Use—(1) General requirements—(i) Adequacy and clarity of directions. Directions for use must be stated in terms which can be easily read and understood by the average person likely to use or to supervise the use of the pesticide. When followed, directions must be adequate to protect the public from fraud and from personal injury and to prevent unreasonable adverse effects on the environment.
- (ii) Placement of directions for use. Directions may appear on any portion of the label provided that they are conspicuous enough to be easily read by the user of the pesticide product. Directions for use may appear on printed or graphic matter which accompanies the pesticide provided that:

(A) If required by the Agency, such printed or graphic matter is securely attached to each package of the pesticide, or placed within the outside

wrapper or bag;

(B) The label bears a reference to the directions for use in accompanying leaflets or circulars, such as "See directions in the enclosed circular:" and

(C) The Administrator determines that it is not necessary for such direc-

tions to appear on the label.

- (iii) Exceptions to requirement for direction for use. (A) Detailed directions for use may be omitted from labeling of pesticides which are intended for use only by manufacturers of products other than pesticide products in their regular manufacturing processes, pro-
- (1) The label clearly shows that the product is intended for use only in manufacturing processes and specifies the type(s) of products involved.
- (2) Adequate information such as technical data sheets or bulletins, is available to the trade specifying the type of product involved and its proper use in manufacturing processes;

- (3) The product will not come into the hands of the general public except after incorporation into finished products; and
- (4) The Administrator determines that such directions are not necessary to prevent unreasonable adverse effects on man or the environment.
- (B) Detailed directions for use may be omitted from the labeling of pesticide products for which sale is limited to physicians, veterinarians, or druggists, provided that:

(1) The label clearly states that the product is for use only by physicians or veterinarians:

(2) The Administrator determines that such directions are not necessary to prevent unreasonable adverse effects on man or the environment; and

(3) The product is also a drug and regulated under the provisions of the Federal Food, Drug and Cosmetic Act.

- (C) Detailed directions for use may be omitted from the labeling of pesticide products which are intended for use only by formulators in preparing pesticides for sale to the public, provided that:
- There is information readily available to the formulators on the composition, toxicity, methods of use, applicable restrictions or limitations, and effectiveness of the product for pesticide purposes;
- (2) The label clearly states that the product is intended for use only in manufacturing, formulating, mixing, or repacking for use as a pesticide and specifies the type(s) of pesticide products involved:
- (3) The product as finally manufactured, formulated, mixed, or repackaged is registered; and
- (4) The Administrator determines that such directions are not necessary to prevent unreasonable adverse effects on man or the environment.
- (2) Contents of Directions for Use. The directions for use shall include the following, under the headings "Directions for Use":
- (i) The statement of use classification as prescribed in paragraph (j) of this section immediately under the heading "Directions for Use."
- (ii) Immediately below the statement of use classification, the statement "It is a violation of Federal law to use this

product in a manner inconsistent with its labeling."

- (iii) The site(s) of application, as for example the crops, animals, areas, or objects to be treated.
- (iv) The target pest(s) associated with each site.
- (v) The dosage rate associated with each site and pest.
- (vi) The method of application, including instructions for dilution, if required, and type(s) of application apparatus or equipment required.
- (vii) The frequency and timing of applications necessary to obtain effective results without causing unreasonable adverse effects on the environment.
- (viii) Worker protection statements meeting the requirements of subpart K of this part.
- (ix) Specific directions concerning the storage and disposal of the pesticide and its container, meeting the requirements of 40 CFR part 165. These instructions shall be grouped and appear under the heading "Storage and Disposal." This heading must be set in type of the same minimum sizes as required for the child hazard warning. (See table in §162.10(h)(1)(iv))
- (x) Any limitations or restrictions on use required to prevent unreasonable adverse effects, such as:
- (A) Required intervals between application and harvest of food or feed
 - (B) Rotational crop restrictions.
- (C) Warnings as required against use on certain crops, animals, objects, or in or adjacent to certain areas.
- (D) For total release foggers as defined in paragraph (h)(2)(iii)(B) of this section, the following statements must be included in the "Directions for Use":
- DO NOT use more than one fogger per room. DO NOT use in small, enclosed spaces such as closets, cabinets, or under counters or tables. Do not use in a room 5 ft. x 5 ft. or smaller; instead, allow fog to enter from other rooms. Turn off ALL ignition sources such as pilot lights (shut off gas valves), other open flames, or running electrical appliances that cycle off and on (i.e., refrigerators, thermostats, etc.). Call your gas utility or management company if you need assistance with your pilot lights."
- (E) For restricted use pesticides, a statement that the pesticide may be applied under the direct supervision of

- a certified applicator who is not physically present at the site of application but nonetheless available to the person applying the pesticide, unless the Agency has determined that the pesticide may only be applied under the direct supervision of a certified applicator who is physically present.
- (F) Other pertinent information which the Administrator determines to be necessary for the protection of man and the environment.
- (j) Statement of Use Classification. By October 22, 1976, all pesticide products must bear on their labels a statement of use classification as described in paragraphs (j) (1) and (2) of this section. Any pesticide product for which some uses are classified for general use and others for restricted use shall be separately labeled according to the labeling standards set forth in this subsection, and shall be marketed as separate products with different registration numbers, one bearing directions only for general use(s) and the other bearing directions for restricted use(s) except that, if a product has both restricted use(s) and general use(s), both of these uses may appear on a product labeled for restricted use. Such products shall be subject to the provisions of paragraph (j)(2) of this section.
- (1) General Use Classification. Pesticide products bearing directions for use(s) classified general shall be labeled with the exact words "General Classification" immediately below the heading "Directions for Use." And reference to the general classification that suggests or implies that the general utility of the pesticide extends beyond those purposes and uses contained in the Directions for Use will be considered a false or misleading statement under the statutory definitions of misbranding.
- (2) Restricted Use Classification. Pesticide products bearing direction for use(s) classified restricted shall bear statements of restricted use classification on the front panel as described below:
- (i) Front panel statement of restricted use classification. (A) At the top of the front panel of the label, set in type of the same minimum sizes as required for human hazard signal words (see

table in paragraph (h)(1)(iv) of this section), and appearing with sufficient prominence relative to other text and graphic material on the front panel to make it unlikely to be overlooked under customary conditions of purchase and use, the statement "Restricted Use Pesticide" shall appear.

(B) Directly below this statement on the front panel, a summary statement of the terms of restriction imposed as a precondition to registration shall appear. If use is restricted to certified applicators, the following statement is required: "For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification." If, however, other regulatory restrictions are imposed, the Administrator will define the appropriate wording for the terms of restriction by regulation.

[40 FR 28268, July 3, 1975; 40 FR 32329, Aug. 1, 1975; 40 FR 36571, Aug. 21, 1975, as amended at 43 FR 5786, Feb. 9, 1978. Redesignated and amended at 53 FR 15991, 15999, May 4, 1988; 57 FR 38146, Aug. 21, 1992; 60 FR 32096, June 19, 1995; 63 FR 9082, Feb. 23, 1998]

Subparts B-J [Reserved]

Subpart K—Worker Protection Statements

SOURCE: $57 \ FR \ 38146$, Aug. 21, 1992, unless otherwise noted.

§ 156.200 Scope and applicability.

(a) Scope. (1) This subpart prescribes statements that must be placed on the pesticide label and in pesticide labeling. These statements incorporate by reference the Worker Protection Standard, part 170 of this chapter. The requirements addressed in these statements are designed to reduce the risk of illness or injury resulting from workers' and pesticide handlers' occupational exposures to pesticides used in the production of agricultural plants on agricultural establishments as defined in §170.3 of this chapter. These statements refer to specific workplace practices designed to reduce or eliminate exposure and to respond to emergencies that may arise from the exposures that may occur.

- (2) This subpart prescribes interim requirements that must be placed on the pesticide label and in pesticide labeling. These interim requirements pertain to restricted-entry intervals, personal protective equipment, and notification. On a case-by-case basis, these interim requirements will be reviewed and may be revised during reregistration or other agency review processes.
- (b) Applicability. (1) The requirements of this subpart apply to each pesticide product that bears directions for use in the production of any agricultural plant on any agricultural establishment as defined in §170.3 of this chapter, or whose labeling reasonably permits such use.
- (2) The requirements of this subpart do not apply to a product that bears directions solely for uses excepted by §170.202(b) of this chapter.
- (c) Effective dates. (1) The effective date of this subpart is October 20, 1992.
- (2) No pesticide product bearing labeling amended and revised as required by this subpart shall be distributed or sold by a registrant prior to April 21, 1993.
- (3) No product to which this subpart applies shall be distributed or sold without amended labeling by any registrant after April 21, 1994.
- (4) No product to which this subpart applies shall be distributed or sold without amended labeling by any person after October 23, 1995.

§ 156.203 Definitions.

Terms in this subpart have the same meanings as they do in the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. In addition, the following terms, as used in this subpart, shall have the meanings stated below:

Funigant means any pesticide product that is a vapor or gas or forms a vapor or gas on application and whose method of pesticidal action is through the gaseous state.

Restricted-entry interval means the time after the end of a pesticide application during which entry to the treated area is restricted.

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products which arises in the course of litigation concerning the effects of such products, regardless of when the information is first acquired, provided that neither of the provisions of paragraphs (b)(3) or (b)(4) of this section are met. Such information shall be submitted in the same manner and according to the same schedules as it would have to be submitted by a current registrant of a pesticide product to which the information pertained.

[62 FR 49388, Sept. 19, 1997; 63 FR 33582, June 19, 1998]

§ 159.165 Toxicological and ecological studies.

Adverse effects information must be submitted as follows:

- (a) Toxicological studies. (1) The results of a study of the toxicity of a pesticide to humans or other non-target domestic organisms if, relative to all previously submitted studies, they show an adverse effect under any of the following conditions:
- (i) That is in a different organ or tissue of the test organism.
- (ii) At a lower dosage, or after a shorter exposure period, or after a shorter latency period.
- (iii) At a higher incidence or frequency.
- (iv) In a different species, strain, sex, or generation of test organism.
 - (v) By a different route of exposure.
- (2) Acute oral, acute dermal, acute inhalation or skin and eye irritation studies in which the only change in toxicity is a numerical decrease in the median lethal dose (LD₅₀), median lethal concentration (LC₅₀) or irritation indices, are not reportable under this part unless the results indicate a more restrictive toxicity category for labeling under the criteria of 40 CFR 156.10(h).
- (b) *Ecological studies.* The results of a study of the toxicity of a pesticide to terrestrial or aquatic wildlife or plants if, relative to all previously submitted studies, they show an adverse effect under any of the following conditions:
- (1) At levels 50 percent or more lower than previous acute toxicity studies with similar species, including determinations of the median lethal dose (LD_{50}), median lethal concentration

(LC $_{50}$), or median effective concentration (EC $_{50}$).

- (2) At lower levels in a chronic study than previous studies with similar species.
- (3) In a study with a previously untested species the results indicate the chronic no observed effect level (NOEL) is 10 percent or less of the lowest LC_{50} or LD_{50} for a similar species.
- (4) For plants when tested at the maximum label application rate or less, if either of the following conditions is met:
- (i) More than 25 percent of terrestrial plants show adverse effects on plant life cycle functions and growth such as germination, emergence, plant vigor, reproduction and yields.
- (ii) More than 50 percent of aquatic plants show adverse effects on plant life cycle functions and growth such as germination, emergence, plant vigor, reproduction and yields.
- (c) Results from a study that demonstrates any toxic effect (even if corroborative of information already known to the Agency), must be submitted if the pesticide is or has been the subject of a Formal Review based on that effect within 5 years of the time the results are received. Within 30 calendar days of the publication of a Notice of Commencement of a Formal Review in the FEDERAL REGISTER, all information which has become reportable due to the commencement of the Formal Review must be submitted.
- (d) Incomplete studies. Information from an incomplete study of the toxicity to any organism of a registered pesticide product or any of its ingredients, impurities, metabolites, or degradation products which would otherwise be reportable under paragraphs (a), (b) or (c) of this section must be submitted if the information meets any one of the folowing three sets of criteria:
- (1) Short-term studies. A study using a test regimine lasting 90 calendar days or less, and all of the following conditions are met:
- (i) All testing has been completed.
- (ii) A preliminary data analysis or gross pathological analysis has been conducted.
- (iii) Final analysis has not been completed.

- (iv) A reasonable period for completion of the final analysis not longer than 90 calendar days following completion of testing has elapsed.
- (v) Comparable information concerning the results of a completed study would be reportable.
- (2) Long-term studies. A study using a test regimine lasting 90 calendar days or less, and all of the following conditions are met:
 - (i) All testing has been completed.
- (ii) A preliminary data analysis or gross pathological analysis has been conducted.
- (iii) Final analysis has not been completed.
- (iv) A reasonable period of completion of final analysis (not longer that 1 year following completion of testing) has elapsed.
- (v) Comparable information concerning the results of a completed study would be reportable.
- (3) Serious adverse effects. Any study in which testing or analysis of results is not yet complete but in which serious adverse effects have already been observed which may reasonably be attributed to exposure to the substances tested, because the effects observed in exposed organisms differ from effects observed in control organisms, are atypical in view of historical experience with the organism tested, or otherwise support a reasonable inference of causation, and 30 days have passed from the date the registrant first has the information.

[62 FR 49388, Sept. 19, 1997; 63 FR 33582, June 19, 1998]

§159.167 Discontinued studies.

The fact that a study has been discontinued before the planned termination must be reported to EPA, with the reason for termination, if submission of information concerning the study is, or would have been, required under this part.

§ 159.170 Human epidemiological and exposure studies.

Information must be submitted which concerns any study that a person described in §159.158(a) has concluded, or might reasonably conclude, shows that a correlation may exist between exposure to a pesticide and observed

adverse effects in humans. Information must also be submitted which concerns exposure monitoring studies that indicate higher levels of risk or exposure than would be expected based on previously available reports, data, or exposure estimates. Such information must be submitted regardless of whether the registrant considers any observed correlation or association to be significant.

§159.178 Information on pesticides in or on food, feed or water.

- (a) Food and feed. Information must be submitted if it shows that the pesticide is present in or on food or feed at a level in excess of established levels, except that information on excess residues resulting solely from studies conducted under authority of FIFRA section 5 or under other controlled research studies conducted to test a pesticide product need not be submitted, provided that the treated crop is not marketed as a food or feed commodity. The information to be submitted is the same as that required in §159.184(c)(1), (2), (3), and (4)(iv)(E), (F), (G), and (H).
- (b) *Water.* (1) Information must be submitted if it shows that a pesticide is present above the water reference level in any of the following instances:
- (i) Waters of the United States, as defined in §122.2 of this chapter, except paragraph (d) of §122.2.
 - (ii) Ground water.
 - (iii) Finished drinking water.
- (2) If the lowest detectable amount of the pesticide is reported, the detection limit must also be reported.
- (3) Information need not be submitted regarding the detection of a pesticide in waters of the United States or finished drinking water if the pesticide is registered for use in finished drinking water or surface water and the amount detected does not exceed the amounts reported by a registrant in its application for registration, as resulting in those waters from legal applications of the pesticide.
- (4) Information need not be submitted concerning detections of pesticides in waters of the United States, ground water or finished drinking water if the substance detected is an inert ingredient, or a metabolite, degradate, contaminant or impurity of