S437986 <u>300</u> 17 MAY 24 1993

Ms. Judy Oldham Helena Chemical Company 6075 Poplar Avenue, Suite 500 Memphis, TN 38119

Dear Ms. Oldham:

Subject: 5 LB. Dimethoate

EPA Registration No. 5905-497

Your Application for Pesticide Amendment

Dated March 22, 1993

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

- 1. Make the labeling changes listed below before you release the product for shipment:
 - a. As discussed on the phone with your associate, Ms. Julia Conway, the section STATEMENT OF PRACTICAL TREATMENT, IF SWALLOWED should be changed back to the wording on the last label accepted by the Agency so that it reads:

IF SWALLOWED - Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

- b. In accordance with PR Notice 93-3, add the statement "for terrestrial uses" to the beginning of the second sentence of the second paragraph under the ENVIRONMENTAL HAZARDS section.
- c. According to our files the tolerance for cabbage will be exceeded utilizing a 3-day PHI. The PHI for cabbage should be changed to 7 days.
- 2. Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling, constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

Note that this acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard (WPS). If any of your products are covered by the WPS, you are required to submit, and receive the Agency's approval by April 21, 1994, of a revised label reflecting the required label statements of 40 CFR 156, published in the FEDERAL REGISTER of August 21, 1992 (57 FR 38102). Further guidance will be issued. According to 40 CFR 156 subpart K, specifically §156.200(c)(3): "No product to which this subpart applies shall be distributed or sold without amended labeling by any registrant after April 21, 1994."

If you have any questions about this letter, contact Barbara Madden at (703) 305-5410 or (703) 305-6600.

Sincerely yours,

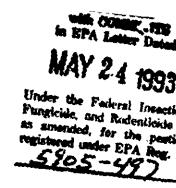
Robert A. Forrest Product Manager (14) Insecticide-Rodenticide Branch Registration Division (H7504C)

enclosure

CONCURRENCES									
SYMBOL									
SHIM ME					***************************************	*****************			
DATE				*****************	***********		_		
EPA Form 1320-1A (1/90)				Printed on Recycled Paper			OFFICIAL FILE COPY		

5 lb. DIMETHOATE

Systemic Insecticide



ACTIVE INGREDIENT:

Dimethoate O,O-dimethyl S-(N-methyl carbamoylmethyl)			
phosphorothioate	57.0%		
INERT INGREDIENTS			
TOTAL			

This product contains 5 lbs. Dimethoate per gallon.

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

SEE INSIDE PAMPHLET FOR DIRECTIONS FOR USE AND ADDITIONAL PRECAUTIONS

PRECAUCION AL USARIO: Si usted no lee ingles no use este producto hasta que le etiqueta haya sido explicado ampliamente.

EPA REG. NO. 5905-497

EPA EST NO.: first letters of batch code indicate producing establishment: 5905-GA-1 = CG; 5905-AR-1 = WA; 5905-IA = DI; 5905-FL-1 = TF; 5905-CA-1 = KC

"RQ" Organophosphorus Pesticides, Liquid, Toxic, Flammable, N.O.S. (Dimethoate/Cyclohexanone/Xylene), Class 6.1 (3), UN3017, PG III (ERG Guide #28)

NET CONTENTS:

MANUFACTURED BY HELENA CHEMICAL COMPANY MEMPHIS, TN 38119

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER - PELIGRO

Corrosive causes irreversible eye damage. Wear goggles, face shields or safety glasses. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water (after handling and before eating, drinking or using tobacco). Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES - Hold eyelids open and flush with a steady gentler stream of water for 15 minutes.

IF SWALLOWED - Call a physician or Poison Control Center. Dilute by drinking one or two glasses of water. Do not induce vomiting. Obtain medical attention immediately.

IF ON SKIN - Wash with plenty of scap and water. Get medical attention if irritation persists.

IF INHALED - Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

NOTE TO PHYSICIAN: The product may cause cholinesterase inhibition. Antidote is Atropine.

ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This pesticide is toxic to wildlife and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

(

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

REENTRY

Do not enter treated areas without protective clothing until sprays have dried. There is a 4 day reentry interval on grape fields and citrus groves. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Do not apply this product in such a manner as to directly or through drift expose workers or other person. The area being treated must be vacated by unprotected persons.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. When oral warnings are given, warnings shall be given in a language customarily understood by workers.

Written or oral warnings must include the following information:

DANGER

(Insert area and field description) treated with Dimethoate on (insert date of application). Do not enter treated areas without protective clothing until sprays have dried. There is a 4 day reentry interval on grape fields and citrus groves. In case of accidental exposure: Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to Dimethoate and describe his condition. For further information see the center panel of the pesticide label.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a cool, dry area. Do not store below 40°F, as product may crystallize. Avoid storage above 95°F as prolonged storage above 90°F may cause loss in grade.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse. Then offer for recycling, or puncture and dispose of in a sanity landfill, or by other procedures approved by state and local authorities.

5 LB. DIMETHOATE is a clear liquid. When added to water, it will disperse readily and will remain physically stable with a minimum amount of agitation.

Do not use, pour, spill or store near heat or flame.

Apply this product only as specified on this label.

Application equipment: 5 Lb. Dimethoate can be applied by any pressure sprayer that will give uniform distribution of the spray such as ground sprayers, aerial sprayers or portable sprayers.

Required Clothing and Equipment for Application:

All applicators, flaggers and all personnel involved with the mixing, loading, and transferring operations must wear the protective clothing and equipment enumerated below. Pilots are exempt from this requirement. The protective clothing and equipment to be worn is as follows:

- a. Impermeable gloves (for example: rubber or plastic covered reinforced gloves).
- b. Boots or boot covers.
- c. Long-sleeved shirt and long pants.
- d. Wide-brimmed hat.
- e. Respirators must be worn by flaggers and mixer/loaders.

Aerial Application:

(

Automatic Flagging devices should be used whenever feasible.

If human flaggers are employed, they must wear the protective clothing and respirator specified on this label.

This product is intended for use by the commercial grower or commercial applicator in conventional hydraulic sprayers, ground applicators or airplane sprayers. When applying by ground equipment, use the recommended amount in sufficient water for thorough coverage; by aircraft, in 3 to 10 gallons of water unicss otherwise specified. Do not apply when weather conditions favor drift of spray from areas treated. Repeat applications as necessary unless otherwise specified. Consult your state experiment station or state extension service for proper timing of applications.

Dimethoate Insecticide is sensitive to Alkaline Hydrolysis and subject to degradation of active ingredient by strong acids, strong bases, and certain heavy metal oxides and salts. Degradation can cause reduced effectiveness of the pesticide performance.

DO NOT ADD DIMETHOATE TO WATER WITH PH VALUES BELOW 4.0 OR ABOVE 7.0. If necessary, water should be buffered within this range with Buffer Xtra Strength or Penetrator Plus.

CONVERSION CHART

1 cup = 8 fl. oz.

1 pint = 16 fl. oz.

1 quart = 32 fl. oz.

1 gallon = 128 fl. oz.

CROPS

FRUIT:

Apples: Apple maggot*, Codling moth** - 12.8 fl. oz. per 100 gals. of water. Do not apply within 28 days of harvest. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Apply at petal-fall and every 10 to 14 days thereafter until control is achieved. *Under heavy infestation some sting injury may occur. **Midwest and eastern states only. Do not graze livestock in treated orchards.

Apples, Pears: Aphids, leafhoppers, mites (except rust mites), lygus bugs, stinkbugs, and campylomma - 6.4-12.8 fl. oz. per 100 gals. water. Do not apply within 28 days of harvest. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not graze livestock in treated orchards.

Grapes (raisin, wine, table and canning grapes): Grape leafhopper, Pacific spider mite (California Only) - 38.4 - 51.2 fl. oz. per acre. Do not apply more than 51.2 fl. oz. per acre. Use higher rate where resistance is present. Dilution Rate and Method of Application: Aerial Application: Apply in 15-30 gal. of water per acre. Ground Application: Apply through concentrate spray equipment in 20-40 gals. of water per acre; or through dilute equipment in 200-400 gals. of water per acre depending upon vine growth density. Repeat applications as necessary. Do not apply within 28 days of harvest. Field Re-entry - 4 days. To avoid objectionable (visible) deposits on canning or table grapes at maturity, do not apply after berries reach 0.25 inch in diameter.

Grapefruit, Lemons, Oranges, Tangerines: Aphids - Ground equipment: 6.4-12.8 fl. oz. per 100 gals. water. Apply as an outside coverage spray. Aircraft Equipment: 25.6-51.2 fl. oz. per acre in 5 to 10 gals. water. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. Mites (except rust mites) - Ground equipment: 6.4-12.8 fl. oz. per 100 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. Scales (except black or snow) - Ground equipment: 12.8-19.2 fl. oz. per 100 gals. water. Apply as a thorough coverage spray. Do not graze livestock in treated orchards. Do not apply within 45 days of harvest. Thrips - Ground equipment: 6.4-12.8 fl. oz. per 100 gals. water. Apply as a mist spray. Aircraft equipment: 25.6-51.2 fl. oz. per acre in 5-10 gals. water. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. White-flies - Ground equipment: 12.8 fl. oz. per 10 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest.

Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not use on citrus seedlings. Make no more than 2 applications to mature fruit. Do not enter treated groves within 4 days of last application.

NUTS:

Pecans: Aphids, mites, leafhoppers - Ground equipment: 8.4 fl. oz. per acre. Aphids - Aerial equipment: 8.4 fl. oz. per acre in a minimum of 5 gals. of finished spray.

Do not graze livestock in treated groves. Do not apply within 21 days of harvest.

VEGETABLE CROPS:

Beans (green, lima, snap, dry): Aphids, grasshoppers, leafhoppers, leaf miners, lygus bugs, mites, Bean leaf beetle, Mexican bean beetle - 6.4 fl. oz. per acre. Beans may be harvested on day of application. Do not feed treated vines. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.

Garbanzo Beans: Aphids, grasshoppers, leafhoppers, leaf miners, lygus bugs, mites - 6.4-12.8 fl. oz. per acre. Beans may be harvested on day of application. Do not feed treated vines. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.

Broccoli, Cauliflower: Aphids - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

Cabbage: Aphids - 6.4-12.8 fl. oz. per acre. Do not apply within 3 days of harvest.

Head Lettuce: Aphids, leafhoppers, leaf miners - 6.4 fl. oz. per acre. Do not apply within 7 days of harvest.

Celery (Florida): Leaf miners - 12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

Leaf Lettuce, Spinach, Collards, Kale, Turnip (greens and roots), Mustard Greens, Swiss Chard, Endive (Escarole): Aphids, leafhoppers, leaf miners - 6.4 fl. oz. per acre. Do not apply within 14 days of harvest.

Lentils: Aphids, lygus bugs - 6.4-12.8 fl. oz. Apply when insects first appear. Repeat applications as necessary. Do not apply within 14 days of harvest. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.

Lupine: Aphids, Lygus Bugs - 6 1/2-13 fl. oz. per acre. Apply when aphids first appear. Make only 2 applications per season. May be harvested on day of application. Do not feed or graze forage or hay. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when clop or weeds are in bloom.

Melons (except watermelons): Aphids, leafhoppers, leaf miners, thrips - 12.8 fl. oz. per acre. Do not apply within 3 days of harvest.

Watermelons: Aphids, leaf miners, leafhoppers - 6.4-12.8 fl. oz per acre. Do not apply within 3 days of harvest.

Peas: Aphids - 4.2 fl. oz. per acre. Peas may be harvested on day of application. Do not feed or graze hay within 21 days after last application when a stationary viner is used. Do not feed or graze when a mobile viner is used. Make no more than one application per season to peas. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.

Peppers: Aphids, leaf miners, maggots - 6.4-8.4 fl. oz. per acre. Peppers may be harvested on day of application.

Potatoes: Aphids, grasshoppers, leaf miners, leafhoppers - 6.4-12.8 fl. oz. per acre. Potatoes may be harvested on day of application.

Tomatoes: Aphids, leaf miners, leafhoppers - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

FIELD CROPS:

Alfalfa: Aphids, grasshoppers, leafhoppers, lygus bugs, reduction of alfalfa weevil larvae - 6.4-12.8 fl. oz. per acre. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Do not apply within 10 days of harvest or pasturing. Make only one application per cutting. Effective only on cutting to which applied.

Field Corn: Banks grass mites (excluding Trans-Pecos area of Texas) - 8.4-12.8 fl. oz. per acre. Aerial Application: Spray over the foliage when mites appear. Apply above rates in 1 or more gals. of water per acre. Grasshoppers - 12.8 fl. oz. per acre. Ground Application: Apply above rate in 20 to 40 gals. of water per acre. Aerial Application: Apply above rate in 1 or more gals. of water per acre. Do not apply within 14 days of harvest. Apply as necessary. Make no more than 3 applications per year. Do not feed or graze within 14 days of last application. Do not apply to corn during the pollen-shed period.

Cotton (grown in California and Arizona): Lygus bugs, leafhoppers, black fleahoppers - 6.4-12.8 fl. oz. per acre. Repeat applications should not be made at intervals closer than 14 days. Make only 2 applications per season at the higher rate. Do not feed treated forage or graze livestock on treated fields. Do not apply within 14 days of harvest.

Cotton: Aphids, mites, thrips, fleahoppers, Lygus bugs -3.2-6.4 fl. oz. per acre. Repeat applications should not be made at intervals closer than 14 days. Do not feed treated forage or graze livestock on treated fields. Do not apply within 14 days of harvest.

Safflower (grown in California and Arizona): Aphids, leafhoppers, plant bugs including lygus and thrips - 6.5-13 fl. oz. per acre. Repeat applications should be made at intervals closer than 14 days. Make only 2 applications per season at the higher rate.

Sorghum (milo): Aphids - 6.4-12.8 fl. oz. per acre. Ground application: Apply above rates in 25 to 40 gals. of water per acre. Aerial application: Apply above rates in 2 or more gals. of water per acre. Banks grass mites (excluding Trans-Pecos area of Texas) - 12.8 fl. oz. per acre. Ground application: Apply above rate in 25 to 40 gals. of water per acre. Aerial application: Apply above rate in 1 or more gals. of water per acre. Grasshoppers - 12.8 fl oz. per acre. Ground application: Apply above rate in 25 to 40 gals. of water per acre. Aerial application: Apply above rate in 1 or more gals. of water per acre. Sorghum midge - 3.2-6.4 fl. oz. per acre. Aerial application: Apply above rates in 1 or more gals. of water per acre. Do not feed or graze within 28 days of last application. Make no more than 3 applications as needed per season. Do not apply after heading.

Soybeans: Mexican been beetle, spider mites, bean leaf beetle - 12.8 fl. oz. per acre. Aerial application: Apply recommended rate in a minimum of 2 gals. of water per acre. Grasshoppers - 12.8 fl. oz. per acre. Ground application: Apply above rate in 25 to 40 gals. of water per acre. Aerial application: Apply above rate in 1 or more gals. of water per acre. Do not feed or graze within 5 days of last application. Do not apply within 21 days of harvest.

Wheat: Aphids (greenbugs) - 6.4-9.6 fl. oz. per acre. Brown wheat mite - 4.2-6.4 fl. oz. per acre. Grasshoppers - 9.6 fl. oz. per acre. Do not apply within 14 days of grazing immature plant. Do not harvest grain within 35 days of last application. Make no more than 2 applications as needed per season.

SEED CROPS:

Alfalfa: Aphids, leafhoppers, lygus bugs, grasshoppers, reduction of alfalfa weevil larvae - 6.4-12.8 fl. oz. per acre. Do not apply to alfalfa in the bloom period. Do not feed or graze livestock in treated crops, hay, threshings or stubble within 10 days of application.

Where cabbage worms and cabbage loopers are a problem, the above rates are compatible with endosulfan, malathion or parathion. Use in accordance with the manufacturer's directions for control of these insects.

ATTENTION: DO NOT USE ON SEED ONIONS, SEED CARROTS OR SEED BERMUDA GRASS.

CITRUS TREES-NONBEARING AND NURSERY STOCK

Consult your state agricultural experimental station or state agricultural extension service for proper timing of applications.

CITRUS: (California, Arizona) Grapefruit, Lemons, Oranges, Tangerines: Aphids, thrips - Foliar Spray: 12.8 fl. oz. per 100 gals. of water. Repeat applications as necessary. May be applied in the year grapefruit, lemon, orange and tangerine trees begin to bear fruit. Do not enter treated groves within 4 days of last application. Do not graze livestock in treated orchards. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.

Soil Drench (Trees 1 to 3 years old): 3 1/4 pints per acre applied in the furrow or basin around the base of tree. Apply when insect injury to new growth appears. Do not apply to trees that will bear fruit within one year. Do not graze livestock in treated orchards. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.

Maggot Sprays: For the control of Housesly maggots, mix 3 1/4 oz. in 5 qts. of water and apply as a coarse spray or with a sprinkling can to fly breeding areas, such as poultry droppings in caged-layer houses, garbage dumps and manure piles. Repeat application as additional manure or garbage is added.

Do not use in edible product area of food processing plants, restaurants or other areas where food is commercially processed. Do not use in service areas when food is exposed.

DO NOT CONTAMINATE FEED AND FOOD STUFFS, DRINKING FOUNTAINS, LITTER AND FEED TROUGHS. DO NOT USE IN MILK PROCESSING ROOMS, INCLUDING MILK HOUSES AND MILK STORAGE ROOMS. DO NOT USE IN HOMES.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.