PM 23 9779-263 lot 12 File

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 31 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Glenda Haage
RIVERSIDE/TERRA CORP
600 FOURTH STREET
SIOUX CITY, IA 51101

Subject: Label Amendment Submission of 09/21/93 in Response to PR Notice 93-7
EPA Reg. No. 9779-263
2,4-D AMINE 4

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
AND
- WITHIN one year from date of this acceptance.

ACCEPTED
with COMMENTS
In EPA Letter Dated

JAN 31 1994

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 977-263

R*

2,4-D Amine 4

ACTIVE INGREDIENT

Dimethylamine salt of 2,4-dichloro-phenoxyacetic acid*.....	46.88%
INERT INGREDIENTS.....	53.12%
TOTAL	100.00%

*Equivalent to 38.94% of the 2,4 isomer of 2,4-D or not less than 3.8 lbs. of the 2,4 isomer of 2,4-D per gal. Isomer specific by AOAC Method No. 6.288-6.292 (14th Ed.)

STOP--READ LABEL BEFORE USING.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

~~PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.~~

Si usted no entiende la etiqueta, busque a alguien para que se la explique a uste detalle. (If you do not understand the label, find someone to explain it to y detail.)

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solu or if these are not available, large quantities of water. Avoid alcohol.
NOTE TO PHYSICIAN: Probable mucosal damage may contra-indicate the use ga lavage.
IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irrit persists.
IF IN EYES: Flush with plenty of water. Get medical attention.

See additional PRECAUTIONARY STATEMENTS on side panel.

EPA Reg. No. 977-263

EPA Est. Nos. 42545-MO-1[G]; 42750-IA-1[I]
(Lot no. indicates establishment)

Manufactured For:
RIVERSIDE/TERRA CORPORATION
P.O. Box 6000, Sioux City, Iowa 51102
Riverside Serves Agriculture. Agriculture Serves Everyone.

NET CONTENTS
_____GALS.

PRECAUTIONARY STATEMENTS

DANGER

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Corrosive. Causes eye damage. Do not get in eyes, on skin, or on clothing. ~~When handling this product, wear chemical resistant gloves, goggles or face shield.~~ Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing spray mist. ~~Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.~~

Applicators and other handlers must wear coveralls over short-sleeved shirt and short pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing of PPE must not be reused until it has been cleaned.

Engineering controls statements:

If the capacity of this container is 1 gallon to 5 gallons, mixers and loaders who do not use a closed mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.
If the capacity of this container is 5 gallons or more a closed mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. The mechanical system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4)]. The handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water except as specified on this label. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area, as this product may injure cotton, beans, other vegetables, certain legumes and ornamentals.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS

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

DIRECTIONS FOR USE

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

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the W Protection Standard, 40 CFR part 170. This Standard contains requirement the protection of agricultural workers on farms, forests, nurseries, greenhouses, and handlers of agricultural pesticides. It contains requirement training, decontamination, notification, and emergency assistance. It contains specific instructions and exceptions pertaining to the statements o label about personal protective equipment (PPE), and restricted-entry int The requirements in this box only apply to uses of this product that are co by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the W Protection Standard and that involves contact with anything that has treated, such as plants, soil, or water, is: coveralls over short-sleeved shir short pants, waterproof gloves, chemical-resistant footwear plus socks protective eyewear.

~~RE ENTRY STATEMENT: Do not enter treated areas without protective clothin sprays have dried. Protective clothing means, at least, a hat or other suitabl covering, a long sleeved shirt and long legged trousers or a coverall type garm of closely woven fabric covering the body, including the arms and legs), shoes, and socks. Because certain states may require more restrictive intervals for various crops treated with this product, consult your State Depa of Agriculture for further information.~~

~~NOTICE TO CROP OWNERS: Written or oral warnings must be given to worke are expected to be in a treated area or in an area about to be treated wi product. When oral warnings are given, warnings shall be given in a lan customarily understood by workers. Oral warnings must be given if there is to believe that written warnings cannot be understood by workers. Oral and warnings must include the following information: "DANGER. Area treated with Amine on (date of application). Do not enter without appropriate protective cl In case of accidental exposure, wash exposed area with plenty of water a medical attention. For further information see PRECAUTIONARY STATEMENTS label."~~

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPO

STORAGE

Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. Keep container closed when not using. Do not allow water intc container as this will cause deterioration of product. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. Keep storage area locked when not in use. In the event of spillage or leakage, soak up the material with absorbent clay, sand, sawdust, or other absorbent material. Scrape up and dispose of in accordance with information given under PESTICIDE DISPOSAL. Repackage and relabel useable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

DISPOSAL

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law and may contaminate groundwater. 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: Plastic Containers-Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Metal Containers-Triple rinse (or equivalent) . Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

USE PRECAUTIONS

This product can reach groundwater as a result of mixing and loading. To minimize groundwater contamination from spills during mixing, loading and cleaning of equipment, take the following steps:

~~Mixing and Loading: When mixing, loading or applying this product, wear chemical resistant gloves. Wash nondisposable gloves thoroughly with soap and water before removing.~~

The mixing and loading of spray mixtures into the spray equipment must be carried out on an impervious pad (i.e., concrete slab, plastic sheeting) large enough to catch any spilled material. If spills occur, contain the spill by using an absorbent material (e.g., sand, earth or synthetic absorbent). Dispose of the contaminated absorbent material by placing in a plastic bag and following disposal instructions on the label.

Triple rinse empty containers and add the rinsate to the mixing tank.

Cleaning of Equipment: When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells and other water sources.

NOTE: Coarse sprays are less likely to drift than fine mist sprays. Do not allow this chemical or dilution of it to come in contact with desirable plants such as cotton, grapes, melons, tomatoes, beans, peas, other vegetables, legumes, ornamentals and fruit trees. Dc not use the same spray equipment for other purposes where even trace amounts of this chemical may cause injury. Do not use in or around greenhouses.

CONTROLS THESE WEEDS

Annual and Biennial Weeds

*Beggarticks
Bullthistle
Coffeeweed
Common Cocklebur
Common Burdock
Common Evening Primrose
Common Lambsquarters
Gumweed
Hairy galinsoga
Jimsonweed
*Knotweed
*Mallow (Venice or Little)
Marshelder
Morningglory (Common, Ivy, Wooly)
*Musk Thistle(***)
Mustards and Yellow Rocket (except Blue Mustard)
Pepper Weeds (except perennial)
**Pigweeds (Amaranthus spp.)
Poison Hemlock
Prickly Lettuce
Ragweed (Common or Giant)
Rough Fleabane
* Russian Thistle
Salsify (Western or Common)
* Smartweeds (Annual Species)
Sowthistles (Annual or Spiny)
St. Johnswort
Sunflower
*Vervains
Vetches
Wild Carrot
Wild Lettuce
Wild Parsnips
Wild Radish
Witchweed

Perennial Weeds

*Bindweed (Hedge, Field, European)
Blue Lettuce
*Canada Thistle
Catnip
Chicory
Dandelion
*Docks
*Dogbanes
*Goldenrod
*Ground Ivy
Healall
*Hoary Cress
*Ironweed
Jerusalem-artichoke
* Many flowered aster
*Nettles (including Stinging)
*Orange Hawkweed
Plantains
Sowthistle (Perennial)
*Vervains
Water Hyacinth
*Wild Garlic
*Wild Onion

*These species may require repeated applications and/or use of the higher rate recommended on this product label even under ideal conditions for application.

**Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.
***Not registered for control of musk thistle in California.

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY, DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply 2,4-D Amine 4 only to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

SELECTIVE WEEDING IN CROPS

Do not use on crops underseeded with legumes. In general, weeds are most easily killed when young and actively growing. Apply in enough water to provide uniform coverage of weeds, usually 5 to 100 gallons per acre by ground equipment and 3 to 10 gallons by aircraft. Higher gallonages can improve coverage in dense weed stands and reduce drift.

GRASSES: In established pastures, turf, and lawns, use 2 to 3 pints per acre-the lower rate on more easily injured grasses. For small areas, use 3/4 to 1 fluid ounce (1½ to 2 tablespoons) per 1000 sq. ft. Mix 3 to 5 gallons of water and apply uniformly over the area. Fall or spring is best time to treat. Repeated treatments may be needed for less susceptible weeds. Treatments will kill or injure alfalfa, sweet clover, and other legumes. White clover (including lading) may be injured by a light application, but recovers; repeated treatments will kill it. In some areas dichondra, bentgrasses, carpet, buffalo and St. Augustine grasses may be injured. Usually colonial bents are more tolerant than creeping types; and velvets are most easily injured. In grass seed fields use 1 to 2 pints per acre--the higher rate where weed stands are heavy and for hard-to-kill species. Make application in spring, before head comes into boot. In new seedlings of grasses tolerant to 2 4-D use 1/2 to 1 ½ pints per acre--the light rate when only easy-to-kill weeds are present; treat after grass has tillered.

Do not apply later than 30 days prior to cutting grass for hay. Do not graze meat animals on treated areas later than 3 days prior to slaughter. Do not graze dairy animals within 7 days after application.

WHEAT AND BARLEY: In spring sown grains from five-leaf stage (or when 6 inches high) to early boot stage, apply 1/2 to 1 pint per acre. In winter grains

apply 1 to 2 pints per acre in the spring from fully tailored to early boot stage.

OATS: More sensitive to 2,4-D Amine than other grains, oats should be sprayed in the spring when well established and tailored and before jointing; use 1/2 to 1 pint per acre.

RICE: Apply 1 to 2 pints per acre when rice is in the late tillering stage of development, at the time of first joint development. Do not apply after panicle initiation, after rice internodes exceed one-half inch, at early seedling, early panicle, boot, or heading stages. Consult local University or Agricultural Extension Service Specialists for more specific information on rates and timing of application.

SORGHUM (Postemergence): Apply 1 pint per acre when sorghum is 4 to 10 iches high according to state recommendations. Use dropped nozzles to keep spray off sorghum plants when sorghum is over 10 inches high.

CORN (Field, Sweet, Popcorn): Apply if to 1 pint per acre. Use lower rate on inbreds. Corn is susceptible to injury at time of emergence and short:, after unfolding of leaves; do not spray during this period nor after first tassels appear. Spray must strike tops of weeds but should not drench corn plants. Use dropped nozzles when corn is over 10 inches high to place spray below its tops. For resistant weeds use up to 2 pints per acre though corn injury may result. Do not cultivate soon after spraying while corn is brittle.

With Liquid Nitrogen Solutions: For late season control of young smartweeds, cocklebur, annual morningglory, and other annual broadleaf weeds less than 1 inch high. Fields should be as clean as possible and corn 20-30 inches high. Apply 1 pint with 80-120 lbs. nitrogen per acre. The spray MUST be prepared by first adding required amount of liquid nitrogen solution to spray tank. Next dilute 1 pint of 2,4-D Amine 4 with 2 quarts of clean water for each acre to be treated with one tankful. Start the tank agitator and SLOWLY add the diluted 2,4-D solution. Spray immediately, maintaining continuous agitation until spray tank is empty. Direct the spray to lower 3" to 4" of corn stalks.

Use spray equipment designated to handle corrosive liquid nitrogen solutions. After spraying, remove any remaining solution and rinse spraying equipment thoroughly with water. Mix only one tank at a time. Do not spray during or immediately following cold weather.

SUGARCANE: Use 1 quart per acre as fall and spring drill (or band) sprays and 2 quarts per acre as blanket spray through layby, to aid in control of Johnsongrass seedlings and susceptible broadleaf weeds.

PINE RELEASE: To control hardwoods, such as oak, hickory, maple, pecan, elm, sumac, and hawthorn in southern pine stands, use 2,4-D Amine undiluted in a concentrate tree injector calibrated to apply 0.75 ml. per injection. Space injections

2" apart, edge to edge, completely around the tree aid close to the base. The injector bit must penetrate the inner bark. On hard-to-kill species such as hickory, dogwood, red maple, blue beech, and ash make injections 1" to 1 ½" apart, edge to edge. Treatment may be made at any time of year.

PASTURES, RANGELAND: Apply 1½ pints per acre when annual or perennial broadleaf weeds are crowing actively in spring or fall; perennials near bud stage. Legumes present may be damaged. Do not apply when grass is in boot to milk stage. Do not apply to seedling grasses or after heading begins. Do not apply later than 30 days prior to cutting grass for hay. Do not graze meat animals on treated areas later than 3 days prior to slaughter. Do not graze animals within 7 days after application.

Consult your State Game and Fish Department or Water Control Agency prior to application of this product for aquatic weed control.

Treatment of aquatic weeds can result in oxygen loss from decomposition of dead weeds. This loss can cause fish suffocation. Therefore, to minimize this hazard, treat 1/3 to 1/2 of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated areas.

Irrigation: Delay the uses of treated waters for irrigation for three weeks after treatment unless an approved assay shows that the water does not contain more than 0.1 ppm 2,4-D acid. Do not treat irrigation ditches in areas where water will be used to overhead sprinkler irrigate susceptible crops especially grapes, tomatoes and cotton.

Potable Water: Delay the use of treated water for domestic purposes for period of three weeks or until such time as an approved assay shows that the water contains no more than 0.1 ppm 2,4-D acid.

WEEDS AND BRUSH IRRIGATION CANAL DITCHBANKS

(Seventeen Western States: AZ, CA, CO, ID, KS, MT, NE, NM, NV, ND, OK, OR, SD, TX, UT, WA, and WY)

For control of annual and perennial broadleaf weeds, apply 1 to 2 quarts of 2,4-D Amine 4 per acre in approximately 20 to 100 gallons per acre. Treat when weeds are young and actively growing before the bud or early bloom stage.

For harder-to-control weeds, a repeat spray after 3 to 4 weeks using the same the rates may be needed for maximum results. Apply no more than two treatments per season.

For woody brush and patches of perennial broadleaf weeds, mix 1 gallon of 2,4-D Amine 4 in 150 gallons of water. Wet foliage thoroughly using about 1 gallon

solution per square rod.

SPRAYING INSTRUCTIONS

Apply with low pressure (10 to 40 psi) power spray equipment mounted on a truck, tractor, or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when air is fairly calm, 5 mph or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes.

Boom spraying onto water surface must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than 2 foot overspray onto water with an average of less than 1 foot overspray to prevent introduction of greater than negligible amounts of chemical into water.

Do not allow dairy animals to graze on treated areas for at least 7 days after spraying. Water within treated banks should not be fished.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons or pets out of treated areas until sprays have dried.

SELECTIVE WEED CONTROL AND PREVENTION OF SEED FORMATION

Where crops are not involved such as roadsides, fence rows, rights-of-way, and similar places, use 1/2 to 1 gallon of this product per acre. Bindweed, whitetop, perennial sowthistle, blue lettuce, bur ragweed, Canada thistle, and other noxious perennials somewhat resistant to 2,4-D will require repeated treatments to kill. Apply on vigorous spring growth to early bloom stage.

To control small areas of woody plants, such as willows, honeysuckle, Virginia creeper, alders, and others susceptible to 2,4-D, use 1/2 to 1 gal. in 100 gals. water; spray to thoroughly wet plants when in full leaf. Re-treat as necessary for control of regrowth and seedlings. In general, it is better to cut tall woody growth and spray suckers when 2 to 4 ft. high. For large areas of woody plants, brush killer products are suggested.

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with

directions under normal conditions of use, but neither this warranty not any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.

SUPPLEMENTAL LABEL

2,4-D Amine 4

(EPA Reg- No. 9779-263)

DIRECTIONS FOR USE

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

AQUATIC WEED CONTROL IN DAMS AND RESERVOIRS

Eurasian milfoil programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system.

Watermilfoil (Myriophyllum spicatum) Control: Apply in spring or early summer when milfoil starts to grow.

Aerial Application: Use 2.5 to 10 gallons per acre of 2,4-D Amine 4 in a minimum of 5 gallons of spray mixture per acre. Do not make aerial applications when the wind speed exceeds 5 mph.

Boat Application (Surface): Use 2.5 to 10 gallons per acre of 2,4-D Amine 4 in a minimum of 5 gallons of spray mixture per acre. Do not make surface applications when the wind speed exceeds 10 mph.

Boat Application (Sub-surface): Use 2.5 to 10 gallons per acre of 2,4-D Amine 4 concentrate directly into the water.

Note: Treatment of aquatic weeds can result in oxygen loss from decomposition of dead weeds. This loss can cause fish suffocation. Therefore, to minimize this hazard, treat 1/3 to 1/2 of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas.

Do not treat within 1/2 mile of potable water intake pipes.

In order to assure maximum safety and weed control, follow label recommendations on this label and all cautions and limitations on the package label.