228-382

2/4/2005



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

FEB - 4 2005

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Jeannie K. Smith Nufarm Americas Inc. 1333 Burr Ridge Parkway, Suite 125A Burr Ridge, IL 60527-0866

Dear Ms. Smith:

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Subject: Application to Add Use on Sod Farms Riverdale Millennium Ultra Plus EPA Registration No. 228-382 Your Submission Dated January 24, 2005

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.

2. Submit one (1) 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 label is enclosed for your records. If you have any questions concerning this letter please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

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Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505C)

Enclosure

## **RIVERDALE®**

# **MILLENNIUM ULTRA<sup>™</sup> PLUS**

FOR SELECTIVE GRASS AND BROADLEAF WEED CONTROL IN ORNAMENTAL LAWNS, TURF GRASSES AND SOD FARMS

CONTAINS 2,4-D, CLOPYRALID, DICAMBA AND MSMA

CONTROLS: Grasses such as Large (Hairy) Crabgrass, Smooth Crabgrass, Southern Crabgrass, Dallisgrass, Dandellon, Chickweed, Black medic, Knotweed, Nutsedge, Plantain, Oxalis, Clover, Cocklebur, Spurge, Thistle and many other species of grass and broadleaf weeds; some of which are listed on this label.

#### ACTIVE INGREDIENTS:

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Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid*	
Monoethanolamine Salt of 3,6-Dichloro-2-Pyridinecarboxylic Acid**	0.82%
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)***	
Monosodium Acid Methanearsonate	
OTHER INGREDIENTS:	74.41%
TOTAL:	100.00%
By Isomer Specific AOAC Method, Equivalent to:	
*2,4-Dichlorophenoxyacetic Acid	lbs./gal.
**3,6-Dichloro-2-Pyridinecarboxylic Acid	lbs./gal.
***3,6-Dichloro-o-Anisic Acid	lbs./gal.
Also Contains Monosodium Methanearsonate	Ibs /oal.
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<sup>1</sup>IN NEW YORK STATE, THIS PRODUCT MAY ONLY BE SOLD TO AND USED BY PROFESSIONAL APPLICATORS AND IS PROHIBITED FROM SALE AND USE IN NASSAU AND SUFFOLK COUNTIES. IN CALIFORNIA AND WASHINGTON, TURFGRASS AND LAWN USES ARE RESTRICTED TO GOLF COURSES ONLY. IN OREGON, THE USE OF THIS PRODUCT IS LIMITED TO THE SITES STATED ON THIS LABEL WHICH ARE AGRICULTURAL\*, FOREST\*, RIGHT-OF-WAY\*, GOLF COURSE OR CEMETERY SITES.

"THIS PRODUCT CANNOT BE USED ON AGRICULTURAL, FOREST SITES OR RIGHT-OF-WAY.

#### **KEEP OUT OF REACH OF CHILDREN**

### CAUTION

SEE BACK PANEL FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300. For Medical Emergencies Only, Call (877) 325-1840.

EPA REG. NO. 228-382 EPA EST. NO. 228-IL-1

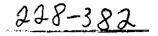
NET CONTENTS

MANUFACTURED BY NUFARM AMERICAS INC. BURR RIDGE, IL 60527-0866



ACCEPTED

FEB - 4 2005 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Ren. No.



000228-00382.121304.Draft

GALS.

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin or clothing. If this container is over one gallon and less than five gallons, then persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron. If this container is five gallons or more in capacity, do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) 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.

NON-WPS TURF USES: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) -- in general only agricultural plant uses are covered by the WPS--must wear long pants, long-sleeved shirt, socks, shoes, rubber gloves and respirator\* when mixing, loading, or applying this product. In addition to the clothing listed above, commercial mixer/loaders must wear chemical resistant in place of rubber gloves except when the product is to be applied to a golf course. After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

**NON-WPS USES:** When mixing, loading or applying this product or repairing or cleaning equipment used with this product, wear chemical resistant gloves, long-sleeved shirt, long pants, socks shoes and respirator\*. Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.

WPS USES: Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 10)-- in general, agricultural plant uses are covered--must wear: long-sleeved shirt, long pants, chemical resistant gloves made of any water proof material, shoes plus socks and respirator. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. If this container is over one gallon and less than five gallons, mixers and loaders who do not use a mechanical system (such as a probe and pump or spigot) to transfer contents of this container must wear coveralls or a chemical resistant apron in addition to the other required PPE.

Engineering Controls Statements: If this container is five gallons or more in capacity, do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) 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. If the mechanical system is used 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.

\* For exposures in enclosed areas: A respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N,R,P or HE prefilter. For exposure outdoors: Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N,R,P or HE filter.

#### USER SAFETY RECOMMENDATIONS

#### USERS SHOULD:

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- · Wash hands, face and arms with soap and water 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.

#### **FIRST AID**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

- IF IN EYES
- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
  - Call a poison control center or doctor for treatment advice.
- IF ON SKIN Take off contaminated clothing. OR CLOTHING • Rinse skin immediately with ple

• Rinse skin immediately with plenty of water for 15 to 20 minutes.

- Call a poison control center or doctor for treatment advice.
- IF SWALLOWED Call poison control center or doctor immediately for treatment advice.
  - · Have person sip a glass of water if able to swallow.
  - . Do not induce vomiting unless told to do so by the poison control center or doctor.
  - . Do not give anything by mouth to an unconscious person.

#### 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, or to areas where surface water is present or to intertidal areas below the mean high water mark. When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not contaminate water when disposing of equipment washwaters. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes.

Clopyralid, an active ingredient in this product, may leach through soil into groundwater under certain conditions of use. Use of this product where soils are permeable, particularly where the water table is shallow, may result in leaching to groundwater. Caution should be exercised when handling this product at mixing, loading, and disposal sites to prevent contamination of groundwater supplies.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Use of closed systems for mixing and 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.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

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 Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment(PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls, gloves made of any waterproof material, and shoes plus socks.

#### 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.

For Turf use, the maximum number of broadcast applications per treatment site is 2 per year.

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

Millennium Ultra<sup>TM</sup> Plus is for use on Ornamental Turf Lawns (Industrial and Institutional), Parks, Cemeteries, Athletic and Recreational Sports Fields, Golf Courses (Fairways, Aprons, \*Tees and Roughs) and similar turf areas.; also for use on Sod Farms. (\*Except Bentgrass tees). Shake well before using.

#### **USE PRECAUTIONS**

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on Carpetgrass, Centipede, St. Augustine, Dichondra, Red Fescue, nor on lawns or turf where desirable clovers are present. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less likely. Avoid contact with exposed feeder roots of ornamentals and trees. Maximum control of weeds will be obtained from Spring or early Fall applications when weeds are actively growing. Do not spray while grass is emerging from dormancy. Do not apply to newly seeded lawns until after the third mowing. Use the higher rate for hard-to-control weeds. Do not apply to newly seeded grasses until well established. Weed control is best achieved when temperatures are above 70°F. Do not spray when air temperature exceeds 85°F on cool season grasses and 90°F on warm season grasses. Do not apply when drought conditions exist.

Do not use on residential turf. Do not collect grass clippings for mulch or compost. Do not send clippings to a compost facility. Applicator must give notice to landowners/property managers to not use grass clippings for mulching or composting.

The suitable use of Millennium Ultra Plus on non-recommended turf species may be determined by treating a small area at any rate/acre which does not exceed 8 pints/acre on cool season grasses and 13 pints/acre on warm season grasses. The treated area should be observed for any sign of turf injury for a period of 30 days of normal growing conditions to determine the phytotoxicity and efficacy to the treated area.

For optimum results: (1) avoid applying during excessively dry or hot periods unless irrigation is used; (2) turf should not be mowed 1 to 2 days before and following application; (3) reseed no sooner than 3 to 4 weeks after application of this product. Be sure soil is moist and lawn healthy before application. If turf is showing stress due to high temperatures and/or drought, irrigation is recommended 2 to 3 days after treatment. Temporary discoloration may occur. High spray volumes may reduce the turf discoloration. Adding oil, wetting agent, or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

#### **GRASSES AND WEEDS CONTROLLED BY MILLENNIUM ULTRA PLUS**

Alder Annual yellow sweet clover Artichoke Aster Austrian fieldcress Bedstraw Beggartick Biden Bindweed Bird vetch Bitterweed Bitter wintercress Black-eyed Susan Black medic Black mustard Blackseed pantain Blackseed plantain Blessed thistle Blue lettuce Blue vervain Box elder Bracted plantain Brassbuttons Bristly oxtongue Broadleaf dock Broadleaf plantain Broomweed Buckhorn Buckhorn plantain **Bulbous buttercup** 

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**Bull nettle Bull thistle** Burdock **Burning nettle** Bur ragweed Burweed Buttercup Canada thistle Carolina geranium Carpetweed Catchweed bedstraw Catsear Catnip Chickweed Chicory Cinquefoil Clover Cockle Cocklebur Coffeebean Coffeeweed Common chickweed Common mullein Common sowthistle Corn Chamomile Creeping jenny Crimson clover Croton Cudweed Curly dock

Curly indigo Dandelion **Dead nettle** Dock Dogbane Dogfennel Elderberry English daisy Fall dandelion False dandelion False flax False sunflower Fiddleneck Field bindweed Field pansy Flea bane (daisy) Flixweed Florida betony Florida pusley Frenchweed Galinsoga Garlic mustard Goathead Goatsbeard Goldenrod Ground ivy Gumweed Hairy bittercress Hairy fleabane Hawkweed

Healall Heartleaf drymary Hedge bindweed Hedge mustard Hemp, Henbit Hoary cress Hoary plantain Hoary vervain Honeysuckle Hop clover Horsenettle Horsetail Indiana mallow Ironweed Jewelweed Jimsonweed Kochia Knawel Knotweed Lambsquarter Lespedeza Locoweed Lupine Mallow Marshelder Matchweed Mexicanweed Milk vetch Milkweed bloodflower MugwortMorningglory

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Mousear chickweed Musk thistle MustardNarrowleaf plantain Narrowleaf vetch Nettle Orange hawkweedOxalis Oxeye daisy Parsley-piert Parsnip **PearlwortPennycress** Pennywort Peppergrass Pepperweed Pigweed Pineywoods bedstraw Plains coreopsis Plantain Poison hemlock Poison ivy Poison oak Pokeweed Poorjoe Povertyweed Prairie Prickly lettuce Prickly sida Primrose Prostrate knotweed Prostrate pigweed Prostrate spurge Prostrate vervain Puncture vine

Purslane Ragweed Red clover Redroot pigweed Red sorrel **Redstem** filaree Rough cinquefoil Rough fleabane Roundleafed marigoid Rush Russian pigweed Russian thistle St. Johnswort Scarlet pimpernel Scotch thistle Sheep sorrel Shepherdspurse Slender plantain Smallflower galinsoga Smartweed Smooth dock Smooth pigweed Sneezeweed Southern wild rose Sowthistle Spanishneedle Spatterdock Speedwell Spiny Spiny Amaranth Spiny cocklebur Spotted catsear

Spotted knapweed Spotted spurge Spurge Spurweed Stinging nettle Stinkweed Stitchwort Strawberry clover Sumac Sunflower Sweet clover Tall nettle Tall vervain Tansy mustard Tansy ragwort Tanweed Tarweed Thistle Tick trefoil Toadflax **Trailing Crownvetch Tumble mustard** Tumble pigweed Tumbleweed Velvet leaf Venice mallow Veronica Vervain Vetch Virginia buttonweed Virginia creeper Virginia pepperweed

Wavyleaf bullthistle Western clematis Western salsify White clover White mustard Wild mustard Wild aster Wild buckwheat Wild carrot Wild four-o'-clock Wild garlic Wild geranium Wild lettuce Wild marigold Wild onion Wild parsnip Wild radish Wild rape Wild strawberry Wild sweet potato Wild vetch Willow Witchweed Wooly morningglory Woodsorrel Wooly croton Wooly plantain Wormseed Yarrow Yellow rocket Yellowflower pepperweed and other broadleaf weeds

Some of these species may require repeat spot applications and/or use of higher rate recommended on this product label even under ideal conditions for application.

#### **ORNAMENTAL LAWNS AND TURF**

Established Bermudagrass and Zoysiagrass: Mix 3 to 5 fluid ounces of Millennium Ultra<sup>™</sup> Plus in 1 to 3 gallons of water for treatment of 1,000 square feet or 1 to 1b gallons of Millennium Ultra<sup>™</sup> Plus in 50 to 150 gallons of water for treatment of one acre of turf. Better control is obtained by making applications shortly after crabgrass emergence in the spring which will also control surviving winter annual broadleaf weeds and emerged summer annual broadleaf weeds. A second application may be necessary 10 to 14 days later for dense weed populations, especially dallisgrass. DO NOT apply this product to bermudagrass or zoysiagrass when air temperatures exceed 90°F nor when turf is under stress such as drought. Zoysiagrass cultivars may vary in the levels of tolerance to applications containing MSMA.

Established Kentucky Bluegrass, Ryegrass, Tall Fescue, Turf-Type Tall Fescues (improved and low growing): Mix 3 fluid ounces of Millennium Ultra<sup>™</sup> Plus in 1 to 3 gallons of water for treatment of 1,000 square feet of turf or 1 gallon of Millennium Ultra<sup>™</sup> Plus in 50 to 150 gallons of water per acre of turf. Make a second application at the same rate 10 to 14 days after the first application. Make spring applications to newly emerged crabgrass and for broadleaf weed control, including oxalis. Summer applications can be made to more mature crabgrass and to broadleaf weeds. DO NOT apply this product to Kentucky bluegrass, tall fescue, or turf-type tall fescues when air temperatures exceed 85°F nor when turf is under stress such as drought.

Injury from this product may occur to mixed stands of Kentucky bluegrass, ryegrass and red fescues (chewing fescue, creeping fescue and spreading fescues). If you are unwilling to accept some degree of turf injury, then do not use this product for mixed stands.

Spot Treatments for Established Bermudagrass, Zoysiagrass, Kentucky Bluegrass, Ryegrass, Tall Fescue, and Turf-Type Tall Fescues: Mix 3 fluid ounces of Millennium Ultra<sup>™</sup> Plus in 1 gallon of water for treatment of 1,000 square feet of turf. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants. Withhold sprinkling or irrigation for 24 hours after application. Two or more repeat applications at 10 to 14 day intervals may be required. Temporary discoloration of the turfgrass may occur.

NOTE: For all grasses (1) Do not overlap spray patterns; and (2) Use reduced rates if grass is stressed from heat, drought, etc. separates or gets very thick, do not combine for field application.

#### STORAGE AND DISPOSAL

**STORAGE:** Always use original container to store pesticides in a secured warehouse or storage building. Do not store near open containers of fertilizers, seeds, or other pesticides. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter this product. Containers should be opened in well ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two patlets high. Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, 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:** Triple rinse (or equivalent), adding rinsate to spray tank. 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. Plastic containers are also disposable by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY

Seller warrants that this herbicide conforms to the chemical description on its label. When used in accordance with label directions under normal conditions, this herbicide is reasonably fit for its intended purposes. Since timing, method of application, weather, plant and soil conditions, mixtures with other chemicals and factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reason-ably foreseeable. The user assumes all risks of any such use, including the use of this product on turf species not recommended on this label. (RV052104)

Riverdale is a Registered Trademark of Nufarm Americas Inc. Millennium Ultra is a Trademark of Nufarm Americas Inc.

Editor's Note:

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In the state sale and Use Prohibitions of this product must be part of printed label text for any product which might possibly enter the channels of trade in the states of New York, California, Oregon and/or Washington. The label prohibitions are optional for all other states.

Special Editor's Note: REVISED

Not to appear on final printed label.

The approved use of this label will automatically replace all previous labels once the Clopyralid Technical, (Labeling approved by The Office of Pesticide Programs (OPP) after September 26, 2002) is used. Please Note; Clopyralid Technical marketed with labeling approved by OPP on September 27, 2002 (or later) prohibits formulating that Clopyralid Technical for use on residential turf. Any questions regarding these statements must be directed to Nufarm's Regulatory Affairs Manager at 1-800/345-3330.

#### NOT TO BE PART OF THE PRINTED LABEL

Revised A/O 11/5/01 Added Sod Farms, WPS text, updated First Aid Statement to comply with PR Notice 2001-01, and added "Shake well before using" via Amendment.

6/6/02 Deleted Sod Farms per EPA's letter dated 6/6/02.

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7/3/02 Added Washington restrictions via Notification. 5/21/04 Revised for use with new Clopyralid Technical, added back Sod Farms, updated State use limitations all via Amendment.