10163 -196

NOV 22 2000

Terre R. Farrell Registration Specialist GOWAN COMPANY P. O. Box 5569 Yuma, AZ 85366

SUBJECT:

Label Amendment - Interim Reregistration Eligibility Document

Betasan 4E, EPA Reg. No. 10163-196 Your Letter Dated October 12, 2000

The above mentioned amendment submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable provided you make the required changes listed below:

- Under the "PPE" and in the "Agriculture Use Requirement" box change "chemical resistant gloves" to chemical resistant gloves such as barrier laminate or viton ≥ 14 mil
- 2. It is recommended that the "statement of Practical Treatment" be changed to "First Aid" and placed on the front panel directly under the header "Precautionary Statement" and revised as follows:

If swallowed:

- 1. Call a 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 by a poison control center or doctor.

CONCURRENCES								
SYMBOL >	7505C							
SURNAME ►	MINOR, E.							
DATE -	Nov 20, 2000							

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
 Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.
- 3. It is recommended that the "Note to Physician" and any other "Notes" be placed directly below the "First Aid" section.
- 4. It is recommended that the "General Use Precautions" subheading be changed to "General Use Precautions and Restrictions" and placed under the "Direction For Use" and all precautions and restrictions be placed in this section.

Submit one (1) copy of your final printed labeling before you release the product for shipment. The amended labeling supersede all previously accepted ones. A stamp copy of the labeling is enclosed for your records.

Sincerely.

Product Manager 25

Herbicide Branch

Registration Division (7505C)

Enclosure

Betasan® 4E

Selective Herbicide for Preemergent Control of CRABGRASS and ANNUAL BLUEGRASS in TURF, ORNAMENTALS, and GROUNDCOVERS

This product contains 4 pounds active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

STATEMENT OF PRECTICAL TREATMENT Organophosphate Pesticide

Call a physician immediately! If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop. Immediately initiate the recommended procedures described below and simultaneously contact a physician, the nearest hospital or a Poison Control Center. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given.

NOTE: Be sure to advise the person contacted that the active ingredient in this compound is a cholinesterase inhibitor and follow the advice given.

If Swallowed: DO NOT induce vomiting. Immediately call a physician or Poison Control Center. Give large quantities of water and get medical attention. If vomiting occurs, give fluids again. Never give anything by mouth to an unconscious person.

If Inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen, preferably with a physician's advice.

If On Skin: Flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs. Wash clothing before reuse.

If In Eyes: Hold eyelids apart and flush eyes with large amounts of running water for at least 15 minutes. Get medical attention immediately.

NOTE TO PHYSICIAN: Exposure to the active ingredient may cause cholinesterase inhibition. Atropine by injection is antidotal. 2-PAM (protopam chloride) is also antidotal when administered early and in conjunction with atropine.

PRECAUTIONARY STATEMENTS Hazards To Humans & Domestic Animals CAUTION

Harmful if swallowed or absorbed through the skin. Avoid breathing spray mist. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse. Avoid contamination of food, feed, or water supplies.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Mixers and loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- In addition, a NIOSH-approved dust-mist filtering respirator with MSHA/NIOSH aproval number prefix TC-21C or a NIOSH-approved respirator with any N², R, P, or HE filter.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergont and a hot water. Keep and wash PPE separately from other laundry.

Gowan GALLONS

EPA Reg. No. 10163-196 EPA Est. No. 34704-MS-1 ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV 2 2 2000

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. Gowan Company ?

Yuma, AZ 85366-5589 ?

ENGINEERING CONTROLS

When handlers use closed systems or enclosed cabs, in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40CFR 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/PPE 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 chemical is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from the treated area.

This product 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.

Do not apply directly to water or to area where water to present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

This product may impair reproduction in birds if used during the breeding season.

PHYSICAL HAZARDS

Combustible. Do not use, store, pour or spill near heat or open flame. Keep container closed when not in use.

DIRECTIONS FOR USE

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

IMPORTANT: THIS PRODUCT WILL NOT WORK UNLESS IT IS WATERED IN FOR 10-15 MINUTES. FOR SAFETY REASONS, WATER THIS PRODUCT IN AS SOON AS POSSIBLE FOLLOWING APPLICATION FOR 10-15 MINUTES AND DO NOT ALLOW CHILDREN OR PETS ON TREATED AREAS UNTIL DRY FOLLOWING THE WATERING.

WATERING-IN MUST BE PERFORMED BY THE COMMERICAL APPLICATOR OR THE COMMERCIAL APPLICATOR MUST PROVIDE THE ABOVE WATERING-IN INSTRUCTIONS TO THE RESIDENT IN WRITING USING BOLD FACE TYPE AND/OR RED PRINT OR OTHER METHODS TO ENSURE THE WARNING IS PROMINENTLY DISPLAYED ON THE MATERIAL PROVIDED TO THE RESIDENT.

USE PRECAUTIONS

- Do not apply this product in a way that will contact workers or other persons.
- · For use only on golf courses (greens, tees and bentgrass fairways only) and on residential lawns.
- Do not use on parks, recreational areas, or other public sites.
- Applications on bentgrass fairways are limited to the following states: OH, PA, NY, MI, CT, MA, IN, IL, NJ, WV, MN, WI, VT, NH, RI, DE, MD, VA). Applications on bentgrass fairways may only be made in the Fall and are limited to one application per year.
- Applications to greens and tees are limited to two per year
- This product may only be broadcast applied by groundboom or by low pressure/high volume turfgun. This product
 may be applied by low pressure handwand for spot treatments only.
- Read all directions before using. Mix well before diluting with water. BETASAN 4E SELECTIVE HERBICIDE should
 be used only for recommended uses and at recommended rates. Clean-up spills on walks or patios by covering with
 dry soil or absorptive material. Bury sweepings and hose area.
- Do not allow children or pets on treated lawns until grass is completely dry.
- BETASAN 4E SELECTIVE HERBICIDE is recommended for use on mineral soils only. Do not apply peat moss to lawn before treating with BETASAN 4E SELECTIVE HERBICIDE.
- Do not use in greenhouses.
- Do not apply this product through any type of irrigation system.

GENERAL INFORMATION

BETASAN 4E SELECTIVE HERBICIDE is recommended for use on home lawns, parks and golf courses, on ornamerical plants and on groundcovers for control of crabgrass, annual bluegrass and other annual weeds listed.

Application of BETASAN 4E SELECTIVE HERBICIDE must precede the emergence of weeds from the soil. Crabgrass will emerge from the soil from 4 to 6 weeks before it is visible above lawn sod. If weeds are visible above the soil, it is too, late to apply BETASAN 4E SELECTIVE HERBICIDE.

Remove leaves, dead tall grass, and other debris before applying BETASAN 4E SELECTIVE HERBICIDE to turf areas.

Any weeds present around ornamentals must be removed or worked into the soil before applying BETASAN 4E SELECTIVE HERBICIDE.

BETASAN 4E SELECTIVE HERBICIDE must be watered into the soil immediately after application. Irrigate with ½ to 1 inch of water following the herbicide application to established lawns, ornamentals, and groundcovers.

WEEDS CONTROLLED

Annual Bluegrass Barnyardgrass (Watergrass) Deadnettle (Henbit) Fall Panicum Foxtails Goosegrass Hairy Crabgrass

Lambsquarters Redroot Pigweed Shepherdspurse Smooth Crabgrass

St. Augustinegrass

Zoysiagrass

TIMING OF APPLICATION

The most effective program for control of crabgrass, goosegrass, annual bluegrass and other annual weeds is one specifically designed for local conditions. Two or more applications per year may be necessary, using the recommended rates given below for a particular weed problem. For additional information regarding timing and rate of application, consult weed specialists of the State Agricultural Extension Service or the State Agricultural Experiment Station.

GRASS LAWNS: BETASAN 4E SELECTIVE HERBICIDE should be applied only to well established grass lawns. It can be used on the following established turf grasses:

Bahiagrass

Bentgrass spp.

Perennial Buegrass spp. Bermudagrass spp. Centipedegrass

following well established ornamentals and groundcovers:

Centipedegrass

Pensacola Bahiagrass Perennial Ryegrass Rough Stalk Bluegrass

Red Top

ORNAMENTALS AND GROUNDCOVERS; BETASAN 4E SELECTIVE HERBICIDE should be applied only to the

		Deciduous Trees		
Herbacious		Shrubs &		
Plants	Groundcovers	Evergreens	Bulbs	
Alyeeum	Ajuga	Abelia	Davodil	
Aster	Campanula	Azalea	Dahlia	
Bachelor's Button	Gazania — — —	Azara	Freesia	
Calendula		- Boxwood	Gladiolus	
Candytuft	lce Plant	— Daphne — — —	Narcissus	
Coral Bell	lvv	- Holly	Ranunculus	
Daisy	Pachysandra — —	Juniper	Tulip	
Marigold	Periwinkle		·	
Pansy	Sedum	- Monterey Pine		
Primrose	Wild			
Stock-	Strawberry	- Privet		
Sweet Pea.		Pyracantha		
Wallflower		Sandankwa		
		Tobira		

For control of crabgrass, apply BETASAN 4E SELECTIVE HERBICIDE at the recommended rate (see RATES OF APPLICATION) any time from fall (September or October) through early spring for spring and summer control. With a late winter or an early spring application, the application must be made prior to crabgrass emergence (see GENERAL

For control of annual bluegrass and other annual weeds, apply BETASAN 4E SELECTIVE HERBICIDE at the recommended rate (see RATES OF APPLICATION) before weeds emerge from the soil.

Where germination of crabgrass, annual bluegrass and other annual weeds extends into the late summer and early fall, a second application of BETASAN 4E SELECTIVE HERBICIDE at the recommended rates should be made 4 to 5 months after the initial application.

BETASAN 4E SELECTIVE HERBICIDE may only be broadcast applied by groundboom or by low pressure/high volume turfgun. This product may be applied by low pressure handward for spot treatments only. spray equipment that will provide uniform application such as a knapsack sprayer, hose proportioner, or pressure sprayer. Immediately following this herbicide application, irrigate thoroughly by applying ½ to 1 inch of water.

RATES OF APPLICATION

Apply a maximum of 6 1/2 gallons (50 pints) of BETASAN 4E SELECTIVE HERBICIDE per acre (18 fluid ounces per 1,000 square feet) per year in two or more applications depending on the weed species and degree of infestation. If weed specialists are unavailable to provide specific local recommendations, follow these directions: CRABGRASS ONLY: Apply 1 7/8-2 1/2 gallons of BETASAN 4E SELECTIVE HERBICIDE per acre with spray voluntes of 80-100 gallons per acre. Or, apply 15-20 pints of BETASAN 4E SELECTIVE HERBICIDE per acre with spray volumes of 80-100 gallons per acre. Or, apply 5.6-7.3 fl. oz. of BETASAN 4E SELECTIVE HERBICIDE per 1,000 sq. ft. with spray volumes of 1.8-2.5 gallons per 1,000 sq. ft. Immediately following this herbicide application, irrigate thoroughly by applying 1/2 to 1 inch of water.

ANNUAL BLUEGRASS AND OTHER ANNUAL WEEDS: Apply 3 1/8 gallons of BETASAN 4E SELECTIVE HERBICIDE per acre with spray volumes of 80-100 gallons per acre. Or, apply 9.4 ft. oz. of BETASAN 4E SELECTIVE HERBICIDE per 1,000 sq. ft. with spray volumes of 1.8-2.5 gallons per acre.

When a weed program involves two to three applications of BETASAN 4E SELECTIVE HERBICIDE for crabgrass, goosegrass and bluegrass, the rate of application may be reduced. The rate recommendations are 1 7/8-2 ½ gallons of product per acre, or 15-20 pints of product per acre, or 5.6-7.3 ft. oz. of product per 1,000 sq. ft. Use the higher rate for heavier infestations.

RESEEDING

Any material that provides effective control of annual grasses may affect new lawn grass seedlings which germinate after treatment. Proper fertilization and watering will encourage the existing turfgrass to fill in the thin or bare spots formerly occupied by crabgrass. The following procedures are suggested in order to minimize any stunting of turf grasses which may occur when reseeding into BETASAN 4E SELECTIVE HERBICIDE-treated areas:

- 1. Do not re-seed within 4 months after application.
- 2. Renovate the area to be re-seeded by raking thoroughly to scarify the soil surface. Where practical, mix peat in with the soil to provide an optimum seedbed.
- 3. When turf diseases or physiological disorders necessitate reseeding sooner than 4 months after BETASAN 4E SELECTIVE HERBICIDE application, apply powdered activated charcoal prior to reseeding to deactivate the BETASAN 4E SELECTIVE HERBICIDE.
- 4. Apply the activated charcoal at a rate of 7 pounds in 14 gallons of water per 1,000 square feet (300 pounds in 600 gallons of water per acre).
- 5. Following application, irrigate the turf with sufficient water to wash the charcoal into the soil.
- 6. Re-seed no sooner than 7 days after applying the charcoal.

STORAGE & DISPOSAL

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

STORAGE: Protect from temperatures below 42°F. Product crystallizes at lower temperatures. Warm or store at higher temperatures and mix to re-dissolve crystals and assure uniformity before use. Do not store near sources of heat or open flame. Store in original container in locked storage area. Keep pesticides separate during storage to prevent cross-contamination with other pesticides or fertilizers.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: For 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. For 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.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.

For other product information, contact Gowan Company or see Material Safety Data Sheet.

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility including injury or damage, resulting from its misuse as such, or in combination with other materials.

Betasan 4E(RED) EPA Tex Pending 10-13-00