JUN 4 1998

Mr. Steve A. McMaster DowElanco 9330 Zionsville Road Indianapolis, IN 46268

Dear Mr. McMaster:

SUBJECT:

Picloram Product Reregistration

Tordon* 101R

EPA Registration Number: 62719-31 Your Resubmission Dated May 7, 1998

EPA has completed its review of your 8-month response to the Picloram Reregistration Eligibility Decision (RED) document. The following comments apply:

- 1. The submitted acute toxicology and product chemistry data satisfy the product-specific data requirements of the RED.
- 2. The Confidential Statements of Formula (CSFs), Basic and 2 Alternate formulations, dated 05/20/96, are acceptable. Copies of the CSFs have been placed in the Agency's file for the subject product. These CSFs supersede previously submitted CSFs for this product.
- 3. The revised labeling is acceptable provided you make the following changes:
- 3(a). Reinstate the "Protective eyewear" requirement under Personal Protective Equipment (PPE). Protective eyewear is required for this product in accordance with the 2,4-D Exposure Reduction Agreement.
- 3(b). Delete the following statement from the paragraph under Hazards to Humans and Domestic Animals: "Wash thoroughly with soap and water after handling." This statement is redundant and/or inconsistent with the User Safety Recommendations.
- 3(c). Delete the statement "Contains ethylene glycol" from its current position at the end of the dermal first aid statement and place it at the end of the First Aid section under the heading "Note To Physician:"

RD:STANTON:PM Team 23:Rm. 237:CM-2:305-5218:Disk #7:62719-31.RRE

		·	co	NCURRENCES	 	
SYMBOL +	7505C					
SURNAME +	S. Stanton	1				
DATE -	Jun 4, 1998					

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

3(d). Delete the following statement from the end of the Pesticide Disposal instructions: "Rinse application equipment after use, at least three times with water, and dispose of rinse water in a non-cropland area away from water supplies." This statement conflicts with the preceding statements that instruct users to contact their state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance in disposing of wastes that cannot be disposed of by use according to the label instructions.

A stamped copy of the labeling is enclosed for your records. Submit one copy of your final printed labeling before you release the product for shipment.

Based on the above considerations, EPA has determined that you have fulfilled the requirements of the picloram RED for the subject product. However, we are unable to reregister the product under FIFRA §4(g)(2)(c) at this time, since it also contains the active ingredient, 2,4-D, for which a reregistration eligibility decision has not yet been made. You will be notified of the Agency's reregistration decision for products containing 2,4-D when the 2,4-D RED is completed.

Sincerely yours,

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

Enclosure

page 1

P1A/Tordon 101R/Amend/04-28-98

ACCEPTED with COMMENTS In EPA Letter Dated
JIN 4 1998

(Base label):

(logo) Dow AgroSciences LLC

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 627/9-3/

Tordon* 101R

For controlling unwanted trees via cut surface treatments in forests and noncropland areas such as fence rows, roadsides, and rights-of-way.

Histomer Specific by AOAC Method No. 978.05 (15th Ed.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING

AVISO

CAUTION

PRECAUCION

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

Causes Substantial But Temporary Eye Injury • Harmful If Swallowed, Inhaled, Or Absorbed Through-Skin

Causes moderate eye irritation • Harmful if Swallowed or Absorbed Through Skin

Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequent repeated skin contact may cause allergic skin reactions in some individuals.

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

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 C on an EPA chemical resistance category selections chart.

Applicators and other handlers, including persons repairing or cleaning equipment, must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride (PVC), or Viton
- · Shoes plus socks
- * Protective eyewear

• For containers over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump or spigot) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to other required PPE.

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 or PPE must not be reused until it has been cleaned.

Engineering Controls Statements

For containers of 5 gallons or more: Do not open pour from this container. A mechanical system (such as 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)], 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.

First Aid

If in eyes: Flush with plenty of water for at least 15 minutes. Get medical attention.

If on skin: Wash with plenty of coap and water. Get medical attention. Contains ethylene glycol.

If swallowed: Call a doctor or get medical attention. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

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

If in eyes: Flush with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists. Contains ethylene glycol.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

Environmental Hazards

This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. Drift or runoff may adversely affect non-target plants. Do not apply directly to water, 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 washwaters.

Picloram is a chemical which can travel (seep or leach) through soil and under certain conditions has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users are advised not to apply picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

An aquifer is defined as "an underground, saturated, permeable, geologic formation capable of producing significant quantities of water to a well or spring. It is the ability of the saturated zone, or portion of that zone, to yield water which makes it an aquifer" (American Chemical Society, 1983)

This chemical can contaminate surface water through spray drift. Under some conditions, picloram may also have a high potential for runoff into surface water (primarily via dissolution in runoff water). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Physical or Chemical Hazards

Do not use or store near heat or open flame. Do not cut or weld container.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional presautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-31

EPA Est. 464-MI-1

*Trademark of Dow AgroSciences LLC

Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Specialty Herbicide

Net Contents XXX

(Datapack cover):

(logo) Dow AgroSciences LLC

Tordon* 101R

For controlling unwanted trees via cut surface treatments in forests and noncropland areas such as fence rows, roadsides, and rights-of-way.

†Isomer Specific by AOAC Method No. 978.05 (15th Ed.)

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Specialty Herbicide

Net Contents XXX

(Page 1 through end):

Precautionary Statements

Hazards to Humans and Domestic Animals

WARNING AVISO CAUTION

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Causes moderate eye irritation • Harmful if Swallowed or Absorbed Through Skin

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Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

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 C on an EPA chemical resistance category selections chart.

Applicators and other handlers, including persons repairing or cleaning equipment, must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride (PVC), or Viton
- · Shoes plus socks
- Protective eyewear
- For containers over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump or spigot) to transfer the contents of this container must wear coverals or a chemical-resistant apron in addition to other required PPE.

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 or PPE must not be reused until it has been cleaned.

Engineering Controls Statements

For containers of 5 gallons or more: Do not open pour from this container. A mechanical system (such as 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)], 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.

First Aid

If-in eyes: Flush with plenty of water-for at least 15 minutes. Get-medical attention.

If on skin: Wash with plenty of soap and water. Get medical attention. Contains ethylene glycol. If swallowed: Gall a doctor or get medical attention. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid-alcohol.

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

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If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

Environmental Hazards

This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. Drift or runoff may adversely affect non-target plants. Do not apply directly to water, 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 washwaters.

Picloram is a chemical which can travel (seep or leach) through soil and under certain conditions has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users are advised not to apply picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

An aquifer is defined as "an underground, saturated, permeable, geologic formation capable of producing significant quantities of water to a well or spring. It is the ability of the saturated zone, or portion of that zone, to yield water which makes it an aquifer" (American Chemical Society, 1983)

This chemical can contaminate surface water through spray drift. Under some conditions, picloram may also have a high potential for runoff into surface water (primarily via dissolution in runoff water). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Physical or Chemical Hazards

Do not use or store near heat or open flame. Do not cut or weld container.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Use undiluted only as indicated below.

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
- Chemical-resistant gloves such as Barrier Laminate, Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Polyvinyl Chloride (PVC), or Viton
- · Shoes plus socks
- Protective eyewear

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.

Entry Restrictions for Non-WPS Uses: Do not enter or allow worker entry into treated areas until sprays have dried, unless applicator and other handler PPE is worn.

Storage and Disposal

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

Storage: Keep container tightly closed when not in use.

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. Rinse application equipment after use, at least three times with water, and dispose of rinse water in a non-cropland area away from water supplies.

Metal Container Disposal: Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic Container Disposal: Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Consult federal, state, or local disposal authorities for approved alternative procedures.

General Information

Tordon 101R herbicide is a **ready-to-use product** that is effective in cut surface applications for killing unwanted trees and preventing undesirable sprouting of cut trees in forest and other non-crop areas such as fence rows, roadsides and rights-of-way.

General Use Precautions

Use this product only as specified on this label.

Maximum Use Rates: Total use of Tordon 101R must not exceed 4 gallons per acre per annual growing season on rights-of-way and other non-crop areas. No more than 4 gallons per acre may be applied within a period of 2 annual growing seasons on forest sites.

Be sure that use of this product conforms to all applicable regulations.

Tordon 101R is highly active as a herbicide, is water soluble, can move with surface runoff water, and can remain phytotoxic for a year or more if it gets into the soil.

Tordon 101R should not be applied on residential or commercial lawns or near ornamental trees and shrubs. Untreated trees can occasionally be affected by root uptake of herbicide through movement into the top soil or by excretion of the product from the roots of nearby treated trees. Do not apply Tordon 101R within the root zone of desirable trees unless such injury can be tolerated.

Do not contaminate cropland, water, or irrigation ditches.

Do Not Contaminate Water Intended for Irrigation or Domestic Purposes. To avoid injury to crops or other desirable plants, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes. Do not apply to snow or frozen ground.

Do not rotate food or feed crops on treated land if they are not registered for use with pictoram until an adequately sensitive bioassay or chemical test shows that no detectable pictoram is present in the soi.

Do not apply on or in the vicinity of sensitive crops of desirable broadleaf plants. Small amounts can cause injury to plants.

Do not allow careless application or spray drift. Do not permit any spray or spray drift to contact desirable plants. Use only gravity flow or very low spray pressure.

Do not remove product from original container except to apply as indicated under Use Directions.

Mixing and Loading: 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.

Woody Plants Controlled by Tordon 101R

ailanthus	elm	maples
alder	firs	oaks
aspen	green ash	pecan
birch	gum	persimmon
cedar	hawthom	serviceberry
cherry	hickory	sourwood
dogwood	hombeam	sweetbay

Approved Uses

Forest Uses

Agricultural Use Requirements for Forest Use: For the following forestry uses, follow PPE and Reentry instructions in the "Agricultural Use Requirements" section of this label.

Non-crop Uses Such As Fence Rows, Roadsides and Rights-of-Way

Use Requirements for Non-cropland Areas: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is applied to non-cropland areas.

Application Methods

Tree Injection Treatment

Use 1 milliliter of undiluted Tordon 101R solution through the bark completely around the tree trunk at intervals of 2 to 3 inches between edges of the injector wounds. Make injections near ground level when using the tree injector or 2 to 4 feet above the ground when using a Hypohatchet Injector or similar device. Treatments can be made in any season. Maples should not be treated during the spring sap flow. With some difficult to control species such as dogwood, hickory, sugar maple, bigleaf maple, tanoak, and some firs, application to a continuous cut rather than to spaced cuts may be more uniformly effective. Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Frill or Girdle Treatment

Make a single hack girdle or "frill" of overlapping ax cuts through the bark completely around the tree as close to the ground as feasible. Spray or paint the injured surface with undiluted Tordon 101R, using enough volume to wet treated areas.

Stump Treatment

Spray or paint the cut surfaces of freshly cut stumps and stubs with undiluted Tordon 101R. The cambium area next to the bark is the most vital area to wet.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other lege! theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

*Trademark of	Dow	AgroS	Sciences	LLC
EPA-Accepted	/			