

EPA Reg. Number:

Date of Issuance:

81927-13

AUG 1 2007

Term of Issuance:

Conditional

Name of Pesticide Product:

Alligare Triclopyr 3

U.S. ENVIRONMENTAL PROTECTION AGENC

Office of Pesticide Programs
Registration Division (H7SO5C)
401 "M" St., S.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:

<u>x</u> Registration Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Alligare, LLC c/o Michael Kellog Pyxis Regulatory Consulting, Inc. 4110 136<sup>th</sup> St. NW Gig Harbor, WA 98332

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is horeby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
  - 2. Make the following changes to your labeling:
    - a. Change the registration number to "81927-13".

Approving Official:

8-1-07

Form 8570-6

- b. Make all of the changes detailed in the attached document "Summary of Comments on Microsoft Word -20070406 Alligare Triclopyr 3\_with 1 GPA changes incorporated\_label submitted to EPA.doc.
- 3. Submit final labeling for this product within 30 days of the date of this letter.

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

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

If you have any questions about this letter, please contact Tobi Colvin-Snyder at 703-305-7801

Jim Tompkins

Product Manager (25)

Herbicide Branch

Registration Division (7505C)

# ALLIGARE TRICLOPYR 3

Herbicide for Control of Woody Plants, Aquatic Plants, Vines and Annual and Perennial Broadleaf Weeds in Forests; Non-crop areas including industrial manufacturing and storage sites; Rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, and railroads; Fence rows; Non-irrigation ditch banks; Around farm buildings; on Christmas tree plantations; on Wetland sites in production forests and industrial non-crop areas; in Aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches which have little or no continuous outflow.

#### **ACTIVE INGREDIENT:**

Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine salt	<b>'</b> 44.4%
OTHER INGREDIENTS:	<u>55.6%</u>
TOTAL:	100.0%

<sup>\*</sup>Contains 3 pounds of Triclopyr acid equivalent per gallon (31.05%)

# KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

Si usted 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.)

	FIRST AID				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>					
HOT LINE NUMBER					

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

**NOTE TO APPLICATOR:** Allergic skin reaction is not expected from exposure to spray solutions of Alligare Triclopyr 3 herbicide when used as directed.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 81927-

**EPA Est. No.** 

Manufactured for:

Alligare, LLC 13 N. 8<sup>th</sup> Street Opelika, AL 36801

ACCEPTED
with COMMENTS
In EPA Letter Dated

AUG 1 2007

**Net Contents:** 

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

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin or swallowed. Do not get in eyes or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers who handle this pesticide must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical resistant gloves (≥ 14 mils) such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber.

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 are given, use detergent and hot water. Keep and wash PPE separately from other laundry.

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**

For terrestrial uses, 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 cleaning equipment or disposing of equipment washwaters.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

For aquatic uses, under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may contribute to fish suffocation. This loss can cause fish suffocation. Therefore, to minimize this hazard, do not treat more than one-third to one-half 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. Consult with the State agency for fish and game before applying to public water to determine if a permit is needed.

#### PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store the product 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 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 (REI). 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:

- Coverails
- Chemical-resistant gloves (≥ 14 mils) such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber.
- Shoes plus socks
- Protective eyewear

## NONAGRICULTURAL 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, forest, nurseries, or greenhouses.

For applications to non-cropland areas, do not enter or allow others to enter the treated area until sprays have dried.

#### **GENERAL INFORMATION**

Alligare Triclopyr 3 is used to control unwanted woody plants, aquatic plants, and annual and perennial broadleaf weeds:

- in Forests
- in Non-crop areas including industrial manufacturing and storage sites
- in Rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, and railroads
- in Fence rows
- in Non-irrigation ditch banks
- around Farm buildings
- on Christmas tree plantations
- on Wetland sites in production forests and industrial non-crop areas

in Aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches which have little
or no continuous outflow

Alligare Triclopyr 3 use on these sites may include application to grazed areas as well as for the establishment and maintenance of wildlife openings.

#### **GENERAL USE PRECAUTIONS**

- Obtain required permits: Consult with appropriate state or local water authorities before applying this product to public waters. State or local public agencies may require permits.
- Do not apply this product through any type of irrigation system.
- Do not apply to ditches or canals used to transport irrigation water. It is permissible to treat nonirrigation ditch banks.
- Do not apply where runoff or irrigation water may flow onto agricultural land as injury to crops may result.
- It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites.
- Do not apply directly to un-impounded rivers or streams.
- Do not apply to salt water bays or estuaries.
- When making application to banks or shorelines of moving water sites, minimize overspray to open water.
- Application through a mist blower is not recommended.
- Do not make direct applications or allow spray mists to drift onto cotton; grapes; soybeans; tobacce; vegetable crops; flowers; ornamental shrubs or trees; or other desirable broadleaf plants.
- For range and pasture sites, including rights-of-ways, fence rows, or any area where grazing and harvesting is allowed, Do not apply more than 2 lb a.e. of triclopyr (2/3 gallon of Alligare Triclopyr 3) per acre per year.
- For forestry uses, do not apply more than 6 lb a.e. of triclopyr (2 gallons of Alligare Triclopyr 3) per acre per year.
- For all terrestrial uses other than rangeland, pasture, forestry sites, and grazed areas, a maximum of 9 lb a.e. of triclopyr (3 gallons of Alligare Triclopyr 3) per acre per year may be applied.
- All livestock, except lactating dairy animals, can graze at any time.
- Lactating dairy animals cannot graze forage until the next growing season after application.
- For all livestock, wait 14 days after application before harvesting hay.
- Grazed areas of non-cropland and forestry sites may be spot treated if they comprise no more than 10% of the total grazable area.
- Withdraw livestock from grazing treated grass or consumption of treated hay at least 3 days before slaughter.
- Arizona: Alligare Triclopyr 3 has not been approved for use on plants grown for commercial production, specifically forests grown for commercial timber production, or on designated grazing areas.

# **APPLICATION DIRECTIONS**

#### **RATES**

This table assists in determining proper volumes of Alligare Triclopyr 3 in the spray tank to avoid exceeding the maximum use rates using varying spray volumes.

## **Maximum Application Rates**

Spray Volume	Maximum Rate of Alligare Triclopyr 3 Gallons per 100 gallons of spray volume				
Gallons/Acre	,	,			
	Rangeland, Pasture Sites, and Other Grazed Areas <sup>1</sup>	Forestry Sites <sup>2</sup>	Other Non-Cropland Sites <sup>3</sup>		
400	Do not use	0.5	0.75		
300	Do not use	0.67	1		
200	Do not use	1	1.5		
100	0.67	2	3		
50	1.33	4	6		
40	1.67	5	7.5		
30	2.33	6.65	10		
20	3.33	10	15		
10	6.67	20	30		

For range and pasture sites, including rights-of-ways, fence rows, or any area where grazing and harvesting is allowed, do not apply more than 2 lb a.e. of triclopyr (2/3 gallon of Alligare Triclopyr 3) per acre per year.

#### **SPRAY ADDITIVES**

All surfactants and drift control agents must be approved for food and feed use when used on food and feed sites.

**Surfactants:** When using surfactants, follow the use directions and precautions listed on the surfactant manufacturer's label. Use the higher recommended concentrations of surfactant in the spray mixture when applying lower sprayer volumes per acre.

**Drift Control Agents:** Agriculturally approved spray thickening drift control agents or high viscosity invert systems may be used with Alligare Triclopyr 3. When using these agents, follow all use directions and precautions on the product label. Do not use a thickening agent with the Microfoil boom, Thru-Valve boom, or other systems that cannot accommodate thick sprays.

#### TANK MIXES

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

# **Tank Mixing Recommendations:**

- 1. Fill spray tank 1/2 full with water.
- 2. Add spray thickening agent (if used).
- 3. Add additional herbicide (if used).
- 4. Add Alligare Triclopyr 3.
- 5. Add surfactant (if used).

<sup>&</sup>lt;sup>2</sup>For forestry uses, do not apply more than 6 lb a.e. of triclopyr (2 gallons of Alligare Triclopyr 3) per acre per year.

<sup>&</sup>lt;sup>3</sup>For all terrestrial uses other than rangeland, pasture, forestry sites, and grazed areas, a maximum of 9 lb a.e. of triclopyr (3 gallons of Alligare Triclopyr 3) per acre per year may be applied.

6. Fill remainder of spray tank.

If combined with emulsifiable concentrate herbicides, moderate continuous adequate agitation is required.

## **SPRAY DRIFT MANAGEMENT**

#### **AVOID INJURIOUS DRIFT**

Applications should only be made when there is little or no hazard from spray drift. Very small quantities of spray may seriously injure susceptible plants.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- 1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the following **AERIAL DRIFT REDUCTION ADVISORY**. [This information is advisory in nature and does not supersede mandatory label requirements.]

#### **AERIAL DRIFT REDUCTION ADVISORY**

**Information on Droplet Size:** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

# **Controlling Droplet Size:**

- 1. **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- 2. **Pressure** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- 3. Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- 4. **Nozzle Orientation** Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- 5. **Nozzle Type** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

**Wind:** Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Applications should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions**: Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sunsets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops is minimal (e.g., when wind is blowing away from the sensitive areas).

#### **APPLICATION EQUIPMENT AND TECHNIQUES**

#### **BROADCAST APPLICATIONS**

Aerial Application: When making aerial applications on rights-of-way or other areas near susceptible crops, apply through a Microfoil¹ or Thru-Valve¹ boom, or use an agriculturally approved drift control agent. Alligare Triclopyr 3 can also be applied using aerial electrostatic spray charging systems. Other drift reducing systems or thickened sprays prepared by using high viscosity inverting systems may be used if they are made as drift-free as are mixtures containing agriculturally approved thickening agents or applications made with the Microfoil or Thru-Valve boom. Keep spray pressures low enough to provide coarse spray droplets. Spray boom should be no longer than 3/4 of the rotor length. Spray only when the wind velocity is low (follow state regulations). Avoid application during air inversions. If a spray thickening agent is used, follow all use recommendations and precautions on the product label.

Note: Reference within this label to equipment produced by or available from other parties is provided without consideration for use by the reader at its discretion and subject to the reader's independent circumstances, evaluation, and expertise. Such reference by Alligare, LLC is not intended as an endorsement of such equipment, shall not constitute a warranty (express or implied) of such equipment, and is not intended to imply that other equipment is not available and equally suitable. Any discussion of methods of use of such equipment does not imply that the reader should use the equipment other than is advised in directions available from the equipment's manufacturer. The reader is responsible for exercising their own judgment and expertise, or consulting with sources other than Alligare, LLC, in selecting and determining how to use its equipment.

Ground Application: To aid in reducing spray drift, Alligare Triclopyr 3 should be applied in thickened (high viscosity) spray mixtures using an agriculturally approved drift control additive, high viscosity invert system, or equivalent as directed by the manufacturer. Use of low pressure nozzles; and operating nozzles in the lower end of the manufacturer's recommendations is advised. To minimize drift, keep the spray boom as low as possible, apply in >20 gallons of spray volume per acre, spray when wind velocities are low; or use an approved drift control agent.

In Hand Gun Applications, select the minimum spray pressure that will provide adequate plant coverage (without forming a mist). Do not apply with nozzles that produce a fine droplet spray.

High Volume Leaf-Stem Treatment: To minimize spray drift, do not use pressure exceeding 50 PSI at the spray nozzle and keep sprays no higher than brush tops. An agriculturally approved thickening agent may be used to reduce spray drift.

#### **APPROVED USES**

Refer to Tables 1 and 2 for lists of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

Apply Alligare Triclopyr 3 at rates of 0.25 to 3 gallons per acre for the control of broadleaf weeds and woody plants. Apply in enough water to provide uniform and complete coverage of the plants to be controlled. Use only water suitable for spraying. Use of an agriculturally approved nonionic surfactant is recommended for all foliar applications. For best results make applications when woody plants and weeds are actively growing.

Use higher rates within the range when brush averages 15 feet or more in height or when brush covers >60% of the area to be treated. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species. When easy to control brush species dominate, rates below those recommended may be effective. Consult State or Local Extension personnel for information.

For hard-to-control species such as ash, black gum, choke cherry, elm, maples, oaks, pines, or winged elm; during late summer applications when plants are mature; or during drought conditions; use higher rates of Alligare Triclopyr 3 alone or use in combination with Tordon 101 Mixture. If lower rates are used on hard-to-control species, re-sprouting may occur in the year following treatment.

When applying Alligare Triclopyr 3 in a tank mix with 2, 4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester herbicides, use higher rates of Alligare Triclopyr 3 for satisfactory brush control.

When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

# FOLIAGE APPLICATIONS WITH GROUND EQUIPMENT

#### **High Volume Foliage Applications**

For control of woody plants, apply Alligare Triclopyr 3 at 1 to 3 gallons per 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. Coverage should be thorough to wet all leaves, stems, and root collars.

Tank Mixing: 1 to 4 quarts of Alligare Triclopyr 3 may be tank mixed with 1 to 2 quarts of 2, 4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester or Tordon 101 Mixture diluted to make 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

Do not exceed maximum allowable use rates per acre. See Rate Table in the Rates Section of APPLICATION DIRECTIONS.

#### Low Volume Foliage Applications

For control of woody plants, mix up to 5 gallons of Alligare Triclopyr 3 in 10 to 100 gallons of spray solution. Adjust the spray concentration of Alligare Triclopyr 3 and total spray volume per acre to match the size and density of target woody plants and kinds of spray equipment used. With low volume sprays, use sufficient spray volume to obtain uniform coverage of target plants including the surfaces of all foliage, stems, and root collars. For best results, a surfactant should be added to all spray mixtures. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Match equipment and delivery rate of spray nozzles to height and density of woody plants. When treating tall, dense brush, a truck mounted spray gun with spray tips that deliver up to 2 gallons per minute at 40 to 60 PSI may be required. Backpack or other types of specialized spray equipment with spray tips that deliver less than 1 gallon of spray per minute may be appropriate for short, low to moderate density brush.

**Tank Mixing:** Up to 3 gallons of Alligare Triclopyr 3 may be applied in tank mix combinations with 2 to 4 quarts of Tordon K or 1 to 2 gallons of Tordon 101 Mixture as a low volume foliar spray. These applications should be made in 10 to 100 gallons of spray solution. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

#### **BROADCAST APPLICATION WITH GROUND EQUIPMENT**

Use equipment that will assure thorough and uniform coverage at spray volumes applied. To improve spray coverage, add an agriculturally approved nonionic surfactant. See the SPRAY ADDITIVES section of APPLICATION DIRECTIONS. See Maximum Application Rates Table in the APPLICATION DIRECTIONS for relationship between mixing rate, spray volume, and maximum application rate.

#### **Woody Plant Control**

**Foliage Treatment:** Apply 2 to 3 gallons of Alligare Triclopyr 3 in 20 to 100 gallons of spray solution per acre.

**Tank Mixing:** Alligare Triclopyr 3 at 2 to 4 quarts per acre may be tank mixed with 1 to 2 gallons of 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile esters or Tordon 101 Mixture in 20 to 100 gallons of spray solution per acre. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

#### **Broadleaf Weed Control**

Apply 1.3 to 6 quarts of Alligare Triclopyr 3 in 20 to 100 gallons of spray solution per acre. Apply any time during the growing season.

**Tank Mixing:** Alligare Triclopyr 3 at 1.3 to 4 quarts per acre may be tank mixed with 2 to 4 quarts of Tordon K; Tordon 101 Mixture, or 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile ester to improve the spectrum of activity. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

# **AERIAL APPLICATION (HELICOPTER ONLY)**

Aerial sprays should be applied using suitable drift control. See the SPRAY DRIFT MANAGEMENT section for drift control advice. Add an agriculturally approved nonionic surfactant. See the SPRAY ADDITIVES and the APPLICATION EQUIPMENT AND TECHNIQUES section. See Maximum Application Rates Table in the APPLICATION DIRECTIONS for relationship between mixing rate, spray volume, and maximum application rate.

#### **FOLIAGE TREATMENT (RIGHTS-OF-WAY)**

Apply 2/3 gallons of Alligare Triclopyr 3 per acre alone or tank mix with 1 to 2 gallons of 2,4-D 3.8 lb amine, like DMA 4 IVM, or low volatile esters; or Tordon 101 Mixture. Apply in total spray volume of 1 to 30 gallons per acre.

When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

#### FOREST MANAGEMENT APPLICATIONS

For broadcast applications, apply the recommended rate of Alligare Triclopyr 3 in 1 to 25 gallons per acre by air or in 10 to 100 gallons per acre by ground. Use sufficient spray volumes to provide thorough plant coverage. To improve spray coverage at volumes less than 50 gallons per acre, add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**. Use application systems designed to prevent spray drift to off-target sites. Nozzles or additives used for drift minimization that produce larger droplets may require higher spray volumes to provide brush control. See **APPLICATION EQUIPMENT AND TECHNIQUES** section.

#### Forest Site Preparation (Not For Conifer Release)

To control susceptible woody plants and broadleaf weeds, apply up to 2 gallons per acre of Alligare Triclopyr 3 in a total spray solution of 1 to 30 gallons per acre. Alligare Triclopyr 3 may be applied at a rate of 1 to 1.5 gallons per acre in a tank mix combination with 1 to 2 gallons of Tordon 101 Mixture or 2,4-D 3.8 lb low volatile ester to broaden the spectrum of woody plants and broadleaf weeds controlled. Use of a nonionic agricultural surfactant is recommended for all foliar applications. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

Conifer Plant Back Interval: Conifer injury may occur if conifers are planted sooner than 1 month after Alligare Triclopyr 3 treatments at rates <1-1/3 gallon per acre; or if conifers are planted sooner than 2 months after treatment with rates of 1-1/3 to 3 gallons per acre. When herbicide tank mixtures are used for forest site preparation, use the longest plant back waiting period recommended on any tank mix partner.

#### **Directed Spray Applications for Conifer Release**

To release conifers from competing hardwoods such as red maple, sugar maple, striped maple, sweetgum, red and white oaks, ash, hickory, alder, birch, aspen, and pin cherry, mix 1 to 2 gallons of Alligare Triclopyr 3 in enough water to make 100 gallons of spray mixture. To improve spray coverage, add an agriculturally approved nonionic surfactant. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

Direct the spray onto foliage of competitive hardwoods using knapsack or backpack sprayers with flat fan nozzles or equivalent. Make applications any time after the hardwoods have reached full leaf size, but before autumn coloration. The majority of treated hardwoods should be less than 6 feet in height to ensure adequate spray coverage. Care should be taken to direct the spray solution away from conifer foliage, particularly foliage of desirable pines.

**Conifer Release Applications:** Spray may cause temporary damage and growth suppression of conifers where direct contact occurs; however, injured conifers should recover and grow normally. **Overthe-top spray applications can kill pines.** 

#### Broadcast Application for Conifer Release in the Northeastern United States

To release spruce, fir, red pine, and white pine from competing hardwoods such as red maple, sugar maple, striped maple, alder, birch (white, yellow, and grey), aspen, ash, pin cherry, and *Rubus* spp. and perennial and annual broadleaf weeds, apply Alligare Triclopyr 3 at 2 to 4 quarts per acre alone or in a tank mix with 2,4-D amine, like DMA 4 IVM, or 2,4-D low volatile ester. Apply no more than 4 pounds acid equivalent per acre from the combined products. Make applications in late summer or early fall after conifers have formed their over-wintering buds; and hardwoods are in full leaf prior to autumn coloration.

Broadcast Applications for Douglas Fir Release in the Pacific Northwest and California

To release Douglas fir from competing vegetation such as broadleaf weeds, alder, blackberry or Scotch broom, apply Alligare Triclopyr 3 at 1-1/3 to 2 quarts per acre alone or in combination with 4 lb per acre of atrazine. Add a nonionic surfactant to the spray solution. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**. Applications should be made in early spring after hardwoods begin growth **and before** Douglas fir bud break ("early foliar" hardwood stage). Applications can also be made in late summer, after Douglas fir seasonal growth has "hardened off" (winter bud set). Make applications while hardwoods are still actively growing. When treating after Douglas fir winter bud set, apply prior to onset of hardwood autumn coloration.

**Note:** Treatments applied during active Douglas fir shoot growth (after spring bud break and prior to winter bud set), may cause injury to Douglas fir trees.

#### **Cut Surface Treatments**

To control hardwood unwanted species such as elm, maple, oak; and conifers in rights-of-way and other noncrop areas, apply Alligare Triclopyr 3, either undiluted or diluted in a 1:1 ratio with water by one of the following methods:

**Tree Injector Method:** Inject 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution through the bark at intervals of 3-4 inches between injection wounds. The tree injections should completely surround the tree at any convenient height.

**Note:** Worker Protection Standard **AGRICULTURAL USE REQUIREMENTS** reentry restrictions do not apply for this application method. Refer to the **NONAGRICULTURAL USE REQUIREMENTS** box.

**Hack and Squirt Method:** Use a hatchet or similar equipment to make cuts in the bark at intervals of 3-4 inches at a convenient height around the circumference of the tree trunk. Spray 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution into each cut.

**Frill or Girdle Method:** Make a single girdle through the bark completely around the tree at a convenient height. Wet the cut surface with undiluted Alligare Triclopyr 3 or the diluted (1:1) solution.

Both the **Hack and Squirt Method** and the **Frill or Girdle Method** may be successfully used during any season except during periods of heavy sap flow of certain species such as maples.

**Stump Treatment:** Spray or paint undiluted Alligare Triclopyr 3 on to the freshly cut surfaces of cut stumps and stubs. The cambium area next to the bark is the most vital area to wet.

# Table 1 Woody Plants Controlled by Alligare Triclopyr 3

Alder	Chinquapin	Maleleuca (seedlings)	Sweetbay Magnolia
Arrowwood	Choke Cherry	Maples	Sweet Gum
Ash	Cottonwood	Mulberry	Sycamore
Aspen	Crataegus (hawthorn)	Oaks	Tan Oak
Bear Clover (Bearmat)	Dogwood	Persimmon	Thimbleberry
Beech	Douglas fir	Pine	Tulip Poplar
Birch	Elderberry	Poison Ivy	Wax Myrtle
Blackberry	Elm	Poison Oak	Western Hemlock
Black gum	Gallberry	Poplar	Wild Rose

Brazilian Pepper

Hazel

Salmonberry

Willow

Cascara

Hornbeam

Salt-bush (Braccharis

Winged elm

spp)

Ceanothus

Kudzu<sup>1</sup>

Sassafras

Cherry

Locust

Scotch Broom

Chinese Tallow

Madrone

Sumac

# Table 2 Annual and Perennial Broadleaf Weeds Controlled by Alligare Triclopyr 3

Bindweed

Dandelion

Plantain

Tropical Sodaapple

Burdock

Elephant Ear

Purple Loosestrife

Vetch

Canada Thistle

Field Bindweed

Ragweed

Wild Lettuce

Chicory

Lambsguarter

Smartweed

**Curly Dock** 

Ligodium

Tansey Ragwort

#### WETLAND SITES IN PRODUCTION FORESTS AND INDUSTRIAL NON-CROP AREAS

Alligare Triclopyr 3 may be used in wetlands within forests; wildlife habitat restoration, wildlife management areas, and industrial non-crop sites; as well as areas adjacent to or surrounding domestic water supply reservoirs, lakes and ponds to control target vegetation in and around standing water sites, such as flood plains, delta, marshes, wetlands, swamps, bogs, and transitional areas between upland and lowland sites, and the banks of ponds and lakes and transition areas between upland and lowland sites.

For control of woody plants and broadleaf weeds in these sites, follow use directions and application methods on this label for **FOREST MANAGEMENT APPLICATIONS**. Refer to Tables 1 and 2 (above) for lists of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

#### **General Use Precautions for Wetland Sites**

- Refer to the GENERAL USE PRECAUTIONS section for additional precautions.
- **Minimize overspray to open water** when treating target vegetation in and around non-flowing, quiescent or transient water. When making applications to control unwanted plants on banks or shorelines of flowing water, minimize over spray to open water.
- **Obtain Required Permits:** Before applying this product in and around public water, consult appropriate local public water control authorities. Permits may be required to treat such areas.
- Recreational Use of Water in the Treatment Area: There are no restrictions on water use in the treatment area for recreational purposes, including swimming and fishing.
- Livestock Use of Water from Treatment Area: There are no restrictions on consumption of water from treated areas by livestock.

#### Purple Loosestrife (Lythrum salicaria)

Purple loosestrife can be controlled with broadcast foliar applications of Alligare Triclopyr 3 at a minimum of 6 to 8 quarts per acre. Apply when purple loosestrife is at the bud to mid-flowering stage of growth. Follow-up applications for control of regrowth should be made the following year to achieve increased control of this weed species. For all applications, add a nonionic surfactant labeled for aquatics to the spray mixture.

<sup>&</sup>lt;sup>1</sup>For complete control, retreatment may be necessary.

Follow all directions and use precautions on the surfactant label.

Thorough wetting of the foliage and stems is necessary to achieve satisfactory control. A minimum spray volume of 50 gallons per acre is recommended for ground broadcast applications.

For backpack applications, a spray solution of 1 to 1.5% Alligare Triclopyr 3 (5 to 7.6 fl oz of Alligare Triclopyr 3 per 4 gallons of water) should be used. All purple loosestrife plants should be thoroughly wetted.

Aerial application by helicopter may be needed when treating restoration sites that are inaccessible, remote, difficult to traverse, isolated, or otherwise unsuited to ground application, or in circumstances where invasive exotic weeds dominate native plans populations over extensive areas and efforts to restore native plant diversity are being conducted. By air, apply in a minimum spray volume of 30 gallons per acre using Thru-Valve or Microfoil boom for 1 gallon per acre if using an aerial electrostatic spray charging system.

#### **Terrestrial Sites Associated with Wetland Areas**

Refer to Tables 1 and 2 (above) for a list of woody plants and broadleaf weeds that are controlled by Alligare Triclopyr 3.

Apply Alligare Triclopyr 3 at rates of 0.25 to 2 gallons per acre for the control of broadleaf weeds and woody plants. Apply in enough water to provide uniform and complete coverage of the plants to be controlled. Use only water suitable for spraying. Use of an agriculturally approved nonionic surfactant is recommended for all foliar applications. Refer to SPRAY ADDITIVES in the APPLICATION DIRECTIONS section. Refer to TANK MIXES in the APPLICATION DIRECTIONS section for the order of addition of surfactants. For best results make applications when woody plants and weeds are actively growing.

Use higher rates within the range when brush averages 15 feet or more in height or when brush covers >60% of the area to be treated. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species.

For hard-to-control species such as ash, black gum, choke cherry, maples, or oaks; during late summer applications when plants are mature; or during drought conditions; use higher rates of Alligare Triclopyr 3 alone or use in combination with a 2,4-D approved for aquatic use, such as DMA 4 IVM, generally the higher rates should be used for satisfactory brush control. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

#### **General Use Precautions for Wetland Sites**

- Refer to the GENERAL USE PRECAUTIONS section for additional precautions.
- If applied to areas where livestock will graze, including rights-of-way or fence rows do not apply more than 2/3 gallon of Alligare Triclopyr 3 per acre per year.
- For forestry uses, do not apply more than 2 gallons of Alligare Triclopyr 3 per acre per year.

## **High Volume Foliage Applications**

For control of woody plants, apply Alligare Triclopyr 3 at 1 to 2 gallons per 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. Coverage should be thorough to wet all leaves, stems, and root collars.

**Tank Mixing:** 1 to 4 quarts of Alligare Triclopyr 3 may be tank mixed with 1 to 2 quarts of 2, 4-D 3.8 lb amine, like DMA 4 IVM, diluted to make 100 gallons of spray solution. Make applications in 100 to 400 gallons of total spray per acre depending on size and density of woody plants. When tank mixing, refer to the individual product labels for precautionary statements, restrictions, recommended rates, approved uses, and a list of weeds and woody plants controlled.

#### **Low Volume Foliage Applications**

For control of woody plants, mix up to 5 gallons of Alligare Triclopyr 3 in 10 to 100 gallons of spray solution. Adjust the spray concentration of Alligare Triclopyr 3 and total spray volume per acre to match the size and density of target woody plants and kinds of spray equipment used. With low volume sprays, use sufficient spray volume to obtain uniform coverage of target plants including the surfaces of all foliage, stems, and root collars. For best results, a labeled aquatic surfactant should be added to all spray mixtures.

Match equipment and delivery rate of spray nozzles to height and density of woody plants. When treating tall, dense brush, a truck mounted spray gun with spray tips that deliver up to 2 gallons per minute at 40 to 60 PSI may be required. Backpack or other types of specialized spray equipment with spray tips that deliver less than 1 gallon of spray per minute may be appropriate for short, low to moderate density brush.

#### **Cut Surface Treatments (Woody Plants)**

To control unwanted trees and other listed woody plants in Table 1 (above), apply Alligare Triclopyr 3, either undiluted or diluted in a 1:1 ratio with water by one of the following methods:

**Tree Injector Method:** Inject 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution through the bark at intervals of 3-4 inches between injection wounds. The tree injections should completely surround the tree at any convenient height.

**Note:** Worker Protection Standard **AGRICULTURAL USE REQUIREMENTS** reentry restrictions do not apply for this application method. Refer to the **NONAGRICULTURAL USE REQUIREMENTS** box.

Hack and Squirt Method: Use a hatchet or similar equipment to make cuts in the bark at intervals of 3-4 inches at a convenient height around the circumference of the tree trunk. Spray 1/2 milliliter (ml) of undiluted Alligare Triclopyr 3 or 1 ml of the diluted (1:1) solution into each cut.

**Frill or Girdle Method:** Make a single girdle through the bark completely around the tree at a convenient height. Wet the cut surface with undiluted Alligare Triclopyr 3 or the diluted (1:1) solution.

Both the **Hack and Squirt Method** and the **Frill or Girdle Method** may be successfully used during any season except during periods of heavy sap flow of certain species such as maples.

**Stump Treatment:** Spray or paint undiluted Alligare Triclopyr 3 on to the freshly cut surfaces of cut stumps and stubs. The cambium area next to the bark is the most vital area to wet.

#### **CHRISTMAS TREE PLANTATIONS**

Alligare Triclopyr 3 is used to control unwanted woody plants and annual and perennial broadleaf weeds in established Christmas tree plantations. For best results, make applications when woody plants and weeds are actively growing. Alligare Triclopyr 3 only controls weeds which are emerged at the time of application.

Brush >8 feet tall is difficult to treat efficiently using hand equipment such as backpack or knapsack sprayers. Use higher rates of Alligare Triclopyr 3 or use cut surface application methods when treating large brush or trees; hard to control species such as ash, black gum, choke cherry, elm, hazel, madrone, maples, oaks or sweetgum; for applications made during drought conditions; or late summer applications when the leaves are mature. For foliar applications, apply in enough water to provide uniform and complete coverage of the plants to be controlled. Applications made under drought conditions may provide less than desirable results. Re-sprouting may occur the year following treatment if lower rates are used on hard-to-control species.

#### **General Use Precautions for Christmas Tree Plantations**

• Do not tank mix with 2,4-D for use in Christmas tree plantations.

- Only apply Alligare Triclopyr 3 to established Christmas trees that have been planted at least one full year prior to application.
- To prevent Christmas tree injury, take care to direct spray away from Christmas tree foliage to avoid contact.
- Do not use on newly seeded grass until well established as indicated by vigorous growth and development of secondary root system and tillering.
- Mow newly seeded turf (alleyways, etc.) two or three times before treatment with Alligare Triclopyr 3.
- Do not reseed Alligare Triclopyr 3 treated Christmas tree areas within three weeks after application.
- Do not use Alligare Triclopyr 3 if legumes, such as clover, are present and injury cannot be tolerated.

#### **Spray Solution Preparation**

Refer to the **TANK MIXES** section of **APPLICATION DIRECTIONS** for order of addition to the spray tank. Continue moderate agitation while mixing and spraying. Use of a nonionic agricultural surfactant is recommended for all applications. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS** for surfactant recommendations.

#### **Application**

Make applications in late summer or early autumn after terminal growth of Christmas trees has hardened of, but before leaf drop of target plants. Apply 2 to 5 pints per acre of Alligare Triclopyr 3 as a foliar spray directed toward the base of Christmas trees. Use sufficient spray volume (20 to 100 gallons per acre) to provide uniform coverage of target plants. Recommended application rates of Alligare Triclopyr 3 (see Table 3, below) will only suppress some well established woody plants that are 2 to 3 years old. Broadcast sprays may also be applied in bands between the rows of planted trees. Select spray equipment that will provide uniform coverage at the desired spray volume.

Alligare Triclopyr 3 spray solution can cause Christmas tree needle and branch injury. To minimize Christmas tree injury, direct sprays to minimize Christmas tree foliage contact. White pine and Douglas fir are more susceptible to injury than blue spruce, white spruce, balsam fir and Frasier fir. Refer to the **General Use Precautions for Christmas Tree Plantations**.

#### **Directed Applications**

For control of hardwoods such as red maple, sugar maple, striped maple, sweetgum, red and white oaks, ash, alder, birch, aspen, and pin cherry; mix 4 to 20 fluid ounces of Alligare Triclopyr 3 in enough water to make 3 gallons of spray solution. For directed applications, do not exceed 2 gallons of Alligare Triclopyr 3 per acre per year. To improve coverage, add a nonionic agricultural surfactant to the spray. See the SPRAY ADDITIVES section of APPLICATION DIRECTIONS for surfactant recommendations. Direct this spray mixture onto foliage of competitive hardwoods using knapsack or backpack sprayers with flat fan (or equivalent) nozzles any time after hardwoods have reached full leaf size, but before autumn coloration (when plants are actively growing). The majority of treated hardwoods should be <8 feet in height to ensure adequate spray coverage.

#### **Cut Surface Treatments**

Use cut surface treatments when treating large brush and trees; hard to control species such as ash, blackgum, choke cherry, elm, hazel, madrone, maples, oaks or sweetgum; for applications during drought conditions; or for late summer applications when the leaves are mature. Refer to the Cut Surface Treatments in the Forest Management section for use directions.

# Table 3 Christmas Tree Plantation Application Rates and Species Controlled

Alligare Triclopyr 3				
2 pints per acre 3 to 4 pints per acre 5 pints per acre				
Clover	Bindweed, Field <sup>1</sup>	Arrowwood⁴		

 Livestock Use of Water from Treatment Area: There are no restrictions on consumption of water from treated areas by livestock.

## Floating and Emerged Aquatic Weeds

**Surface Application:** Use a spray boom, handgun or other similar suitable equipment mounted on a boat or vehicle. Thorough wetting of foliage is essential for maximum effectiveness. Use 20 to 200 gallons per acre of spray mixture. Special precautions such as the use of low spray pressure, large droplet producing nozzles or addition of a labeled thickening agent may minimize spray drift in areas near sensitive crops.

**Aerial Application (Helicopter only):** Apply using a Microfoil, Thru-Valve boom, aerial electrostatic spray charging system, or a drift control additive in the spray solution. Apply in a minimum of 1 gallon of total spray solution per acre. Do not apply when weather conditions favor drift to sensitive areas. See the **SPRAY DRIFT MANAGEMENT** section for drift control advice.

Apply 0.5 to 2 gallons of Alligare Triclopyr 3 per acre as a foliar application for control of waterhyacinth, alligatorweed (see specific directions below), and other susceptible emerged and floating herbaceous weeds and woody plants. Make applications using surface or aerial equipment. User higher rates in the rate range when plants are mature, when the weed mass is dense, or for difficult to control species. Repeat treatments may be necessary to control regrowth and weeds which escaped spray, but do not apply more than 2 gallons of Alligare Triclopyr 3 per acre per annual growing season. Make applications when plants are actively growing.

Use of a nonionic surfactant in the spray solution is recommended to improve control. Follow all directions and use precautions on the aquatic surfactant label.

# Floating and Emerged Weed Control – Alligare Triclopyr 3 Rates

Weed Species	Scientific Name	Gallons Per Acre	Application Timing and Remarks
Waterhyacinth	Eichhornia crassipes	0.5 – 2	Apply when plants are actively growing. Use the higher rate when the weed mass is dense. Thoroughly wet all foliage. Repeat treatments may be needed to control regrowth or escaped plants.
Alligatorweed	Alternanthera philoxeroides	0.75 – 2	Thoroughly wet all foliage. Weeds growing outside the margins of a body of water can be controlled. Alligatorweed growing in water will be only partially controlled. Top growth above water will be controlled, but plants will likely regrow from underwater tissue. Use a nonionic aquatic surfactant for best results.

# Potable Water Intake Setbacks for Control of Floating and Emerged Weeds – Lakes, Reservoirs, or Ponds

Minimum setback distances from functioning potable water intakes for human consumption for the application of Alligare Triclopyr 3 must be observed when controlling floating and emerged weeds in lakes, reservoirs or ponds. These setback restrictions do not apply to terrestrial applications made adjacent to potable water intakes. Existing potable water intakes which are no longer in use are not considered to be functioning and these setback restrictions do not apply. Examples of this would be potable water intakes replaced by potable water wells or connections to a municipal water system.

The following table provides the minimum setback distances based on the Alligare Triclopyr 3 rate and the area treated for floating and emerged weed control.

Alligare Triclopyr 3				
2 pints per acre	3 to 4 pints per acre	5 pints per acre		
Dandelion	Blackberry <sup>2</sup>	Aspen		
Dock, Curly	Chicory <sup>3</sup>	Beech <sup>4</sup>		
Lambsquarter	Fireweed	Birch⁴		
Lespedeza	lvy, Ground	Chinquapin		
Plantain, Broadleaf	Lettuce, Wild	Cottonwood <sup>4</sup>		
Plantain, Buckhorn	Oxalis	Elderberry		
Ragweed, Common	Poison Ivy	Grape, Wild		
Vetch	Smartweed <sup>1</sup>	Mulberry <sup>4</sup>		
	Thistle, Canada <sup>1</sup>	Poplar <sup>4</sup>		
	Violet, Wild	Sassafras <sup>4</sup>		
	Virginia Creeper <sup>2</sup>	Sumac⁴		
		Sycamore <sup>4</sup>		

<sup>&</sup>lt;sup>1</sup>Top growth control, retreatment may be necessary

#### **AQUATIC SITES**

Alligare Triclopyr 3 can be used to control emersed, submersed, and floating aquatic plants in aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches (with little or no continuous outflow), marshes, and wetlands. Alligare Triclopyr 3 can also be used to control broadleaf and woody vegetation on banks and shores within or adjacent to these and other aquatic sites.

## **Aquatic Weeds Controlled by Alligare Triclopyr 3**

Alligatorweed	Milfoil species	Purple loosestrife
American lotus	Nuphar (spatterdock)	Waterhyacinth
American frogbit	Parrotfeather <sup>1</sup>	Waterlilly
Aquatic sodaapple	Pickerelweed	Waterprimrose
Eurasian watermilfoil	Pennywort	

Retreatment may be needed to achieve desired level of control.

#### **General Use Precautions for Aquatic Sites**

- Refer to the GENERAL USE PRECAUTIONS section for additional precautions.
- **Obtain Required Permits:** Before applying this product to public waters, consult with appropriate state or local water authorities. State or local public agencies may require permits.
- Do not use treated water for irrigation for 120 days following application. As an alternative to waiting 120 days, treated water may be used for irrigation once the level of triclopyr in the intake water is determined to be non-detectable by laboratory analysis (immunoassay). There is no restriction on use of water from the treatment area to irrigate established grasses.
- Recreational Use of Water in the Treatment Area: There are no restrictions on water use in the treatment area for recreational purposes, including swimming and fishing.

<sup>&</sup>lt;sup>2</sup>Use 4 pints per acre.

<sup>&</sup>lt;sup>3</sup>Suppression

<sup>&</sup>lt;sup>4</sup>Seedlings less than 2-3 years old

# Potable Water Intake Setback Distances for Application of Alligare Triclopyr 3 for Control of Floating and Emerged Weeds in Lakes, Reservoirs, or Ponds

Minimum Setback Distances (feet)						
		TRICLOPYR 3 R	ate (quarts/acre)			
Area Treated (acres)	2 4 6 8					
<4	0	200	400	500		
>4 – 8	0	200	700	900		
>8 – 16	0	200	700	1000		
>16	0	200	900	1300		

Alligare Triclopyr 3 can be applied around functioning potable water intakes or closer than these setback distances as long as the intake is turned off until the level of triclopyr in the intake water is determined to be less than or equal to 0.4 parts per million (ppm) as determined by laboratory analysis or immunoassay.

Submerged Weeds – Control of Eurasian Watermilfoil and other Susceptible Species
Subsurface Application: Alligare Triclopyr 3 can be applied directly into the water through boatmounted distribution systems. Subsurface application may be desirable near areas of susceptible crops or other desirable broadleaf plants to avoid spray drift. Refer to the Rate Table below to determine the desired amount.

**Surface Application:** Alligare Triclopyr 3 can be applied either as a concentrate or as a spray solution diluted in water. Use a minimum spray volume of 5 gallons per acre. Do not apply when weather conditions favor drift to sensitive areas. See the **SPRAY DRIFT MANAGEMENT** section for drift control advice.

Apply 0.75 to 2.5 ppm acid equivalent (a.e.) of Alligare Triclopyr 3 for control of Eurasian watermilfoil (*Myriophyllum spicatum*) and other susceptible submerged weeds in ponds, lakes, reservoirs, and in non-irrigation canals or ditches that have little or no continuous outflow. Make applications using surface or subsurface application. User higher rates within the rate range in areas of greater water exchange. Repeat treatments may be necessary, but do not apply more than 2.5 ppm acid equivalent of Alligare Triclopyr 3 per acre per annual growing season. Refer to following table to determine the desired amount.

Make applications in spring or early summer when Eurasian watermilfoil or other submersed weeds are actively growing.

Alligare Triclopyr 3 Rates for Control of Submerged Weeds in Ponds, Lakes, Reservoirs, and in Non-irrigation Canals or Ditches

	Alligare	Triclopyr 3 gall	ons per surface	area at specifie	ed depth		
Water Depth (feet)	0.75 ppm	1 ppm	1.5 ppm	2 ppm	2.5 ppm		
1	0.7	0.9	1.4	1.8	2.3		
2	1.4	1.8	3.3	3.6	4.6		
3	2.1	2.9	4.1	5.4	6.8		
4	2.7	3.6	5.4	7.2	9.1		
5	3.4	4.5	6.8	9.0	11.3		
6	4.1	5.4	8.1	10.9	13.6		
7	4.8	6.3	9.5	12.7	15.8		
8	5.5	7.2	10.9	14.5	18.1		
9	6.1	8.1	12.2	16.3	20.4		
10	6.8	9.0	13.6	18.1	22.6		
15	10.2	13.6	20.4	27.2	33.9		
20	13.6	18.1	27.2	36.2	45.3		

Potable Water Intake Setbacks for Control of Submerged Weeds – Lakes, Reservoirs, or Ponds Minimum setback distances from functioning potable water intakes for human consumption for the application of Alligare Triclopyr 3 must be observed when controlling submerged weeds in lakes, reservoirs or ponds. These setback restrictions do not apply to terrestrial applications made adjacent to potable water intakes. Existing potable water intakes which are no longer in use are not considered to be functioning and these setback restrictions do not apply. Examples of this would be potable water intakes replaced by potable water wells or connections to a municipal water system.

The following table provides the minimum setback distances based on the Alligare Triclopyr 3 rate and the area treated for submerged weed control.

# Potable Water Intake Setback Distances for Application of Alligare Triclopyr 3 for Control of Submerged Weeds in Lakes, Reservoirs, or Ponds

· · · · · · · · · · · · · · · · · · ·	Minimum Setback Distances (feet)							
	Concentration of Triclopyr Acid Equivalent in Water (ppm a.e.)							
Area Treated	0.75 1 1.5 2 2.5							
(acres)	ppm	ppm	ppm	ppm	ppm			
<4	300	400	600	800	1000			
>4 - 8	420	560	840	1120	1400			
>8 – 16	600	800	1200	1600	2000			
>16 - 32	780	1040	1560	2080	2600			
>32 acres, calculate the minimum setback distance using formula given for chosen application rate	Setback (ft) = [800 X In (acres) – 160]/3.33	Setback (ft) = [800 X In (acres) – 160]/2.5	Setback (ft) = [800 X In (acres) – 160]/1.67	Setback (ft) = [800 X In (acres) – 160]/1.25	Setback (ft) = [800 X In (acres) – 160]			

**Example Calculations:** 

## To apply Alligare Triclopyr 3 at 2.5 PPM a.e. to 50 acres:

Setback in feet

= [800 X In (50 acres)] - 160

= [800 X 3.912] - 160

= 2970 feet

#### To apply Alligare Triclopyr 3 at 0.75 PPM a.e. to 50 acres:

Setback in feet

= [800 X In (50 acres)] - 160

3.33

= [800 X 3.912] - 160

3.33

= 892 feet

Alligare Triclopyr 3 can be applied around functioning potable water intakes or closer than these setback distances as long as the intake is turned off until the level of Triclopyr in the intake water is determined to be less than or equal to 0.4 parts per million (ppm) as determined by laboratory analysis or immunoassay.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store above 28°F or agitate before use.

**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:**

**Plastic Container:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or 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.

**Metal Container:** 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.

#### LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY

Upon purchase or use of this product, purchaser and user agree to the following terms:

<u>Warranty</u>: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. The Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. No such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

<u>Terms of Sale</u>: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

<u>Limitation of Liability</u>: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. Under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.