

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 7, 2015

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

Subject: Label Amendment – Add chemical mowing use Product Name: Alligare Triclopyr 3 EPA Registration Number: 81927-13 Application Date: March 5, 2015 Decision Number: 502398

Dear Mr. Kellogg:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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

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If you have any questions, please contact Mindy Ondish by phone at 703-605-0723, or via email at <u>ondish.mindy@epa.gov</u>.

Sincerely,

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Reuben Baris, Product Manager 25 Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

Note to reviewer: Text in [brackets] indicates optional text

GROUP

5

HERBICIDE

# **ALLIGARE TRICLOPYR 3**

Herbicide for Control of Woody Plants, Aquatic Plants and Annual and Perennial Broadleaf Weeds in Forests; Industrial 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; Non-crop areas around farm buildings; on Christmas tree plantations; Chemical moving[\*]; 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.

[\*Not approved for this use in California.]

#### **ACTIVE INGREDIENT:**

Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine salt*	44.4%
OTHER INGREDIENTS:	55.6%
TOTAL:	100.0%

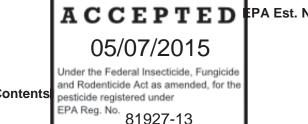
\*Contains 3 pounds of Triclopyr acid equivalent per gallon (31.05%)

# **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
lf 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>
lf 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>
If swallowed	<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 or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	HOT LINE NUMBER
going for treatme information.	container or label with you when calling a poison control center or doctor, or nt. You may also contact 1-800-424-9300 for emergency medical treatment
of Alligare Triclop	<b>CATOR:</b> Allergic skin reaction is not expected from exposure to spray solutions byr 3 herbicide when used as directed.
NOTE TO PHYS	ICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
A Reg. No. 8192	7-13 ACCEPTED EPA Est.

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



Net Contents

#### 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, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

# 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
- Waterproof gloves

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.

#### Users should:

# USER SAFETY RECOMMENDATIONS

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

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.

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.

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.

# 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:

- Coveralls
- Waterproof gloves
- 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, 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.

# PRODUCT INFORMATION

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

- in Forests
- in Industrial 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
- for Chemical mowing [(Not approved for this use in California)]

- 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.

#### **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.
- 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.
- When making application to banks or shorelines of moving water sites, minimize overspray to open water.

#### USE RESTRICTIONS

- 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.
- Do not apply directly to un-impounded rivers or streams.
- Do not apply to salt water bays or estuaries.
- Do not apply using a mistblower.
- Do not make direct applications or allow spray mists to drift onto cotton; grapes; soybeans; tobacco; vegetable crops; flowers; ornamental shrubs or trees; or other desirable broadleaf plants.
- For rights-of-ways, fence rows, or any area where grazing and haying 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 forestry sites, and grazing/haying 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.
- Do not harvest hay for 14 days after application.
- 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 Gallons/Acre	Maximum Rate Gallons per 100		
	Grazed/Hayed Non-Cropland Sites <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

<sup>1</sup> For rights-of-ways, fence rows, or any area where grazing and haying is allowed, do not apply more than 2 lb a.e. of triclopyr (2/3 gallon of Alligare Triclopyr 3) per acre per year.

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

#### 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).
- 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.
- 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 sun sets 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 Microfoil<sup>1</sup> or Thru-Valve<sup>1</sup> boom, or use an agriculturally approved drift control agent. 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 directions and precautions on the product label.

<sup>1</sup>**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  $\geq$ 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 specified 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, application 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, application 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, application 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, application 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, application 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 gallon 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, application rates, approved uses, and a list of weeds and woody plants controlled.

#### FOREST MANAGEMENT APPLICATIONS

For broadcast applications, apply the specified 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, application 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 listed 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. **Over-the-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 **NON-AGRICULTURAL 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 1Woody Plants Controlled by Alligare Triclopyr 3

Alder Arrowwood Ash Aspen Bear Clover (Bearmat)	Chinquapin Choke Cherry Cottonwood <i>Crataegus</i> (hawthorn) Dogwood	Maleleuca (seedlings) Maples Mulberry Oaks Persimmon	Sweetbay Magnolia Sweet Gum Sycamore Tan Oak 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	Sa
Cascara	Hornbeam	Sa
		sp
Ceanothus	Kudzu <sup>1</sup>	Sa

Salmonberry Salt-bush (*Braccharis* spp.) Salt cedar<sup>2</sup> Sassafras Scotch Broom Sumac Willow Winged elm

Chinese Tallow Madrone Suma<sup>1</sup>For complete control, retreatment may be necessary.

Locust

<sup>2</sup>Use cut surface treatments for best results.

Cherry

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

Bindweed Burdock Canada Thistle	Dandelion Elephant Ear Field Bindweed	Plantain Purple Loosestrife Ragweed	Tropical Soda apple Vetch Wild Lettuce
Chicory	Lambsquarter	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.

# **Use Restrictions and Precautions for Wetland Sites**

- Refer to the **USE PRECAUTIONS** and **USE RESTRICTIONS** section for additional restrictions and 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.

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 only.

#### **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, application rates, approved uses, and a list of weeds and woody plants controlled.

#### **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, application 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 **NON-AGRICULTURAL 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.

#### Use Restrictions and 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 off, 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. Specified 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 **Use Restrictions and 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, salt cedar 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.

Alligare Triclopyr 3			
2 pints per acre 3 to 4 pints per acre		5 pints per acre	
Clover	Bindweed, Field <sup>1</sup>	Arrowwood <sup>4</sup>	
Dandelion	Blackberry <sup>2</sup>	Aspen	
Dock, Curly	Chicory <sup>3</sup>	Beech <sup>4</sup>	
Lambsquarter	Fireweed	Birch <sup>4</sup>	
Lespedeza	Ivy, Ground	Chinquapin	

# Table 3Christmas Tree PlantationApplication Rates and Species Controlled

Alligare Triclopyr 3			
2 pints per acre 3 to 4 pints per acre 5 pints per ac			
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>	Sumac <sup>4</sup>	
		Sycamore <sup>4</sup>	

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

<sup>2</sup>Use 4 pints per acre.

<sup>3</sup>Suppression

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

# CHEMICAL MOWING ON NON-CROPLAND SITES INFESTED WITH ANNUAL AND PERENNIAL BROADLEAF WEEDS OR WOODY PLANTS[\*]

#### [\*Not approved for this use in California]

Apply Alligare Triclopyr 3 to the cut surfaces of weed or brush stubble under the deck of a rotary mower such as the Lucas "64" System or other approved equipment that is designed to uniformly apply the herbicide. Use this method of application for control of annual and perennial broadleaf weeds and for suppression and stem density reduction of woody plants that occur on rights-of-way, airport grounds, petroleum tank farms or other industrial sites. Apply when growing conditions are favorable and there is active plant growth.

**Broadleaf Weed Control:** Apply this product at labeled rates under the section Broadcast Application with Ground Equipment, Broadleaf Weed Control. Apply in a minimum spray volume of 3 gallons per acre. Follow label directions for herbicides that may be applied in tank mix combination with this product to improve weed control or broaden the spectrum of weeds controlled.

**Woody Plant Control:** For suppression and stem density reduction of woody species, use 3 to 6 quarts of Alligare Triclopyr 3 in a minimum spray volume of 5 gallons per acre. Follow label directions for herbicides that may be applied in tank mix combination with this product to improve woody plant control or broaden the spectrum of woody plants controlled.

#### **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.

Alligatorweed	Milfoil species	Purple loosestrife
American lotus	Nuphar (spatterdock)	Waterhyacinth

# Aquatic Weeds Controlled by Alligare Triclopyr 3

American frogbit	Parrotfeather <sup>1</sup>	Waterlilly
Aquatic soda apple	Pickerelweed	Waterprimrose
Eurasian watermilfoil	Pennywort	

<sup>1</sup>Retreatment may be needed to achieve desired level of control.

#### **Use Restrictions and Precautions for Aquatic Sites**

- Refer to the USE PRECAUTIONS and USE RESTRICTIONS section of this label for additional precautions and restrictions.
- **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.
- 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, 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.

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	0.75 – 2	Thoroughly wet all foliage. Weeds growing outside the margins of a body of water can be

# Floating and Emerged Weed Control – Alligare Triclopyr 3 Rates

Weed Species	Scientific Name	Gallons Per Acre	Application Timing and Remarks
	philoxeroides		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.

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

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

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. Use 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.

Concentration of Triclopyr Acid Equivalent in Water (ppm a.e.)					
	Alligare Triclopyr 3 gallons per surface area at specified depth				
Water Depth	0.75	1	1.5	2	2.5
(feet)	ppm	ppm	ppm	ppm	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

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

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 ln (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
	= <u>[800 X 3.912] - 160</u>
	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 must be disposed of on site or at an approved waste disposal facility.

# CONTAINER HANDLING:

# [NONREFILLABLE CONTAINERS]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable container  $\leq$  5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

# [REFILLABLE CONTAINERS]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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

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

**Warranty:** 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.

**Terms of Sale:** 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.

**Limitation of Liability:** 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. To the extent consistent with applicable law, 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.

[EPA approval date]