Introduction and Project Overview

Both Erie and Campbell Lakes are located in Western Skagit County, south of the City of Anacortes. Lake Erie is 110 acres in size with and average depth of 6 feet and a maximum depth of 14 feet. The lake has a relatively small watershed of 1.62 square miles. The shoreline is a mixture of both residential and commercial real estate with large areas remaining undeveloped. Lake Erie drains into Campbell Lake approximately one mile to the southwest. Lake Campbell is 370 acres in size with an average depth of 8 feet and maximum depth of 16 feet. The watershed of Lake Campbell is larger than that of Lake Erie – draining approximately 5.68 square miles.

Both Erie and Campbell Lakes have a history of being negatively impacted by the excessive growth of aquatic plants. The main characteristic of both of these lakes that contributes to excessive populations of nuisance and noxious weeds is the expansive littoral zones and nutrient loading. The littoral zone is the area where plants tend to be able to grow and is usually considered to be any part of the lake where the depth is around 10 feet or less. Through grant funding from the Department of Ecology, a Phase One Lake Restoration Study was completed on these lakes during the 1980's. Following this expansive study, Phase Two was initiated and a whole lake Alum (Aluminum Sulfate) application was made to both lakes. This was done along with acquiring an aquatic weed harvester for weed suppression activities. This management strategy was abandoned after it was decided that the level of desired success was not being met. By the early 2000's weed growth was again above nuisance levels and use of the lake by residents and those accessing it via the public access was significantly impaired. It was around this time frame that Eurasian Milfoil is believed to have been introduced to the system.

To help obtain funding and facilitate the activities, a Lake Management District was formed for both lakes. The funds obtained through the taxing district are facilitated through Skagit County's Public Works Department. AquaTechnex has been contracted by the County and District to provide lake management services and recommendations for much of the life of the Lake Management District.

Survey Methods

The objective of this survey is to determine the extent and coverage of the aquatic plant community in Erie and Campbell Lakes and to identify the locations and densities of any aquatic plants currently on the state noxious weed list. The survey focuses on the littoral edge of the lake to map the extent of floating and submerged aquatic plants.

Our survey crew followed the protocol which has been in place for many years and has been successful. We maintain a file set up in ArcGIS mapping software that includes all the previous years' information and sampling locations. This information is kept on a Panasonic Toughbook in the field which is linked to a GPS receiver to display the location of the mapping vessel in real time. This method makes it very efficient to move from one sampling site to the next where data is collect from year to year.

The surveys for Erie and Campbell Lakes were completed on June 3rd. AquaTechnex biologists mobilized to the lakes to begin the season's work. To perform the survey, a 16 foot Lund mapping vessel equipped with ArcGIS mapping equipment including a Trimble ProXT GPS receiver and Panasonic Toughbook running Trimble GIS mapping software was mobilized to the lakes. The boat team navigated the shoreline mapping surveying transects at regular intervals around the lakes noting the conditions present. At these points the species collected were noted, overall dominance was determined, along with the estimated percent of bottom covered. This data was entered into the database at each data collection point. The survey team also noted the plant community characteristics throughout the lake as they moved from location to location. After the rake toss sampling points were all completed and the submerged plant community sampled, the shoreline was again traveled in the case of Lake Erie to note the overall extent of the Lily population.

This field data was brought back to our offices, processed and used to create maps and a summary report for the County and District which documented the current conditions and listed recommendations for control. Key findings from this survey are noted below.

Survey Results

The following objectives had been chosen for the aquatic plant surveys in 2009:

- Sample and monitor the current plant communities in both Erie and Campbell lakes.
- Track any shifts in native plant community over time.
- Survey and map the current extent of aquatic plants currently on the state noxious weed list, specifically Eurasian Water Milfoil.

Prior to arriving at the lakes, past mapping efforts were reviewed in order to gain an understanding of previous plant community composition. This is important so more useful observations during the survey can be made as to shifts in plant communities. Maps created from the surveys are located at the end of this document. Reviews and summaries of the results for each lake can be found below.

Campbell Lake. The survey of Campbell Lake began by navigating around the entire shoreline of the lake to identify and map locations where Eurasian Water Milfoil (Myriopyllum spicatum) was growing. Milfoil populations were noted as having expanded throughout the lake. Shorelines in many areas were dominated by this state listed noxious weed. In some cases it was found growing as stands of a few plants but in many areas it had formed dense stands. The densest infestations were found on the south shore. Following the mapping of Eurasian Milfoil, the lake was then sampled using a rake toss method at specific sampling locations to note the current species composition. The two most dominant species of submerged plants surveyed in Campbell Lake are Naiad (Najas flexilis) and Chara. These low-growing species were found in most of the sampling locations and were dominant in the rake tosses.



Photo showing whole milfoil plant floating in Campbell Lake.

Lake Erie. The first item mapped in Lake Erie was the Nuphar (*Nuphar polysepala*). This is a plant with large heart-shaped leaves which float on or above the water – often held up by its very robust stem. This species was noted as beginning to encroach on the public water access and it was decided that it should be monitored to determine if it should be controlled. Another pass was made around the lake to identify and map all locations at the lake where Milfoil was present. Although there were isolated plants

growing on the north shore and one location on the west edge the primary concentration of plants were noted as growing along the south shoreline right up against the Nuphar stand. It is possible that due to the prevailing winds at Lake Erie come out of the Northeast and push plants toward the south shore. Following these two focused survey attempts the native plant population was surveyed using established sampling locations around the lake. The two most dominant species of submerged plants are Naiad (*Najas flexilis*) and Chara. Chara is actually considered a plant-like macro algae – it does appear to be a plant but lacks a true vascular system. Native pondweeds species do make up a portion of the plant community but the Najas and Chara dominate most of the bottom substrate.

Treatment Recommendations

The recommendations provided to the County and District included continued focus on management of Eurasian Water Milfoil along the littoral zones of both lakes.

Campbell Lake. The survey results at Campbell Lake showed an expansion in the population of Eurasian Milfoil. Populations were expanding along the entire shoreline and it was noted at the time of the survey that entire plants (roots and all) were floating along the surface of the lake. It was recommended that the Eurasian Milfoil be treated with a systemic herbicide such as Renovate OTF (active ingredient triclopyr). Treatment polygons were created based on the survey and the map is attached to the end of this document.

Lake Erie. Six priority treatment areas were located from the initial survey. Though there are a few isolated locations along the shoreline where Eurasian Milfoil was located, the main infestation seems to be along the southern shore. Treatment of the milfoil with Renovate OTF herbicide is recommended. This product – active ingredient triclopyr – is systemic in nature and should result in the death of the entire plant root and all. The same recommendation of a systemic herbicide (AquaPro – active ingredient Glyphosate) is recommended for the treatment of the Nuphar lily.

Treatment Implementation

Before any chemical applications can be completed, the NPDES permit requires notification of the public. This notice is distributed to all shoreline residents and businesses adjacent to the treatment areas. Our team delivered this notice on July 9th to Lake Erie and on July 10th to Campbell Lake. Copies of these notices are included at the end of this document.

On July 29th, AquaTechnex biologists mobilized to Lake Erie and first completed the required shoreline posting in order to perform the treatments. After all potentially impacted shoreline properties were posted Nuphar populations near the public access ramp were treated back a bit in an effort to maintain clear access to the lake. To do this, the herbicide AquaPro (active ingredient Glyphosate) was used. This is a systemic herbicide designed to kill the entire plant and is applied to the surface of the pads.

Following the applications on Lake Erie the team moved down the road to Campbell Lake. As was done on Lake Erie, prior to any applications beginning, a shoreline notice was placed at all potentially impacted areas. Treatments for Eurasian Milfoil were completed using Renovate OTF herbicide. This was distributed over the treatment areas using a blower system. Treatments began and ended at the public access boat launch.

A boat-mounted spray system was used to navigate the lakes and treat the Nuphar on Lake Erie. A blower system was utilized to apply the granular herbicides.

Future Considerations and Thoughts

In July, 2800 triploid grass carp were stocked into Erie and Campbell Lakes. AquaTechnex biologists were on site during this stocking. The LMD Board members decided that the stocking of the grass carp would be an effective way to aid control efforts intended to focus on Eurasian Milfoil. It was also considered important to make a more long-term control effort to reign in this noxious weed. An important consideration is that Eurasian Milfoil is not very high on the food preference list for Grass Carp and they may focus feeding on other plant species first. It will be very important in the future to focus surveying efforts on monitoring for any changes in native species composition as the fish may influence a shift.

AquaTechnex has also partnered with the Mapping Network in order to produce high quality bathymetry maps at a very reasonable cost. This process involves collecting data from the lake and processing that information to create extremely accurate lake maps. AquaTechnex biologists would travel to the lake with our bathymetry mapping vessel. This system links a Trimble GPS data logger with sub foot accuracy with a hydro acoustic depth sounding system with 0.2 cm accuracy. This system is calibrated to collect a GPS location and depth attribute every two seconds.

A sampling protocol is followed, we travel on transects with approximately 20 foot spacing across the entire lake. This data is then shipped back to Cabela's geographers for processing. They use ArcGIS mapping software and other technology to develop extremely accurate bathymetry maps and 3D models of the lake. They will also calculate the exact water volume for this system. Other measurements are also possible based on

[ERIE AND CAMPBELL LAKES, SKAGIT COUNTY 2009]

December 15, 2009

the needs of the client. The maps and a report will be created and supplied to the Community by AquaTechnex as the regional mapping partner.

This process can be repeated at intervals that make sense to the community and the change of depths or sediment loading rate are then obvious and can be measured. These maps have value to lake managers to calculate exact water volume and to track sedimentation. They may also have value to lake residents to help them understand structure and habitat to increase their enjoyment while fishing. This mapping is something that is available and could be considered by the LMD.

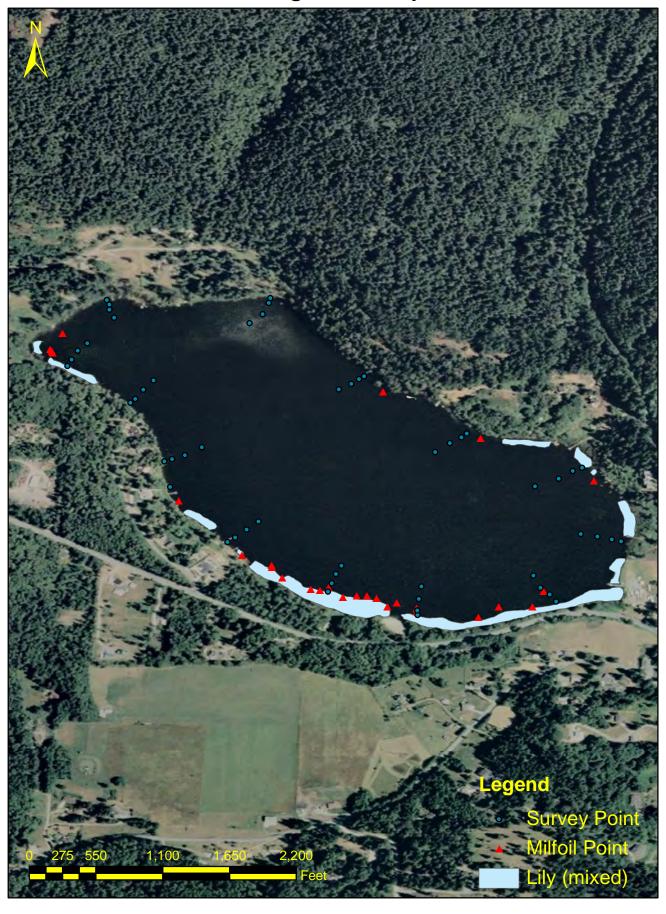
Attached Documents

Survey maps created for both Erie and Campbell Lakes.

Public notices for both Erie and Campbell Lakes are included.

Product labels can be found for Renovate OTF and AquaPro.

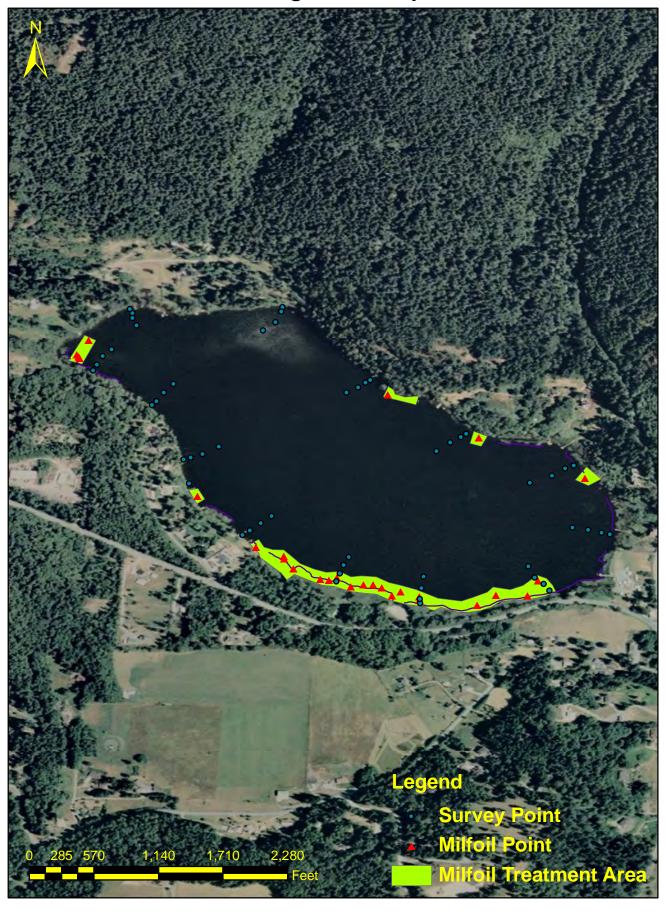
Erie Lake, Skagit County June 2009



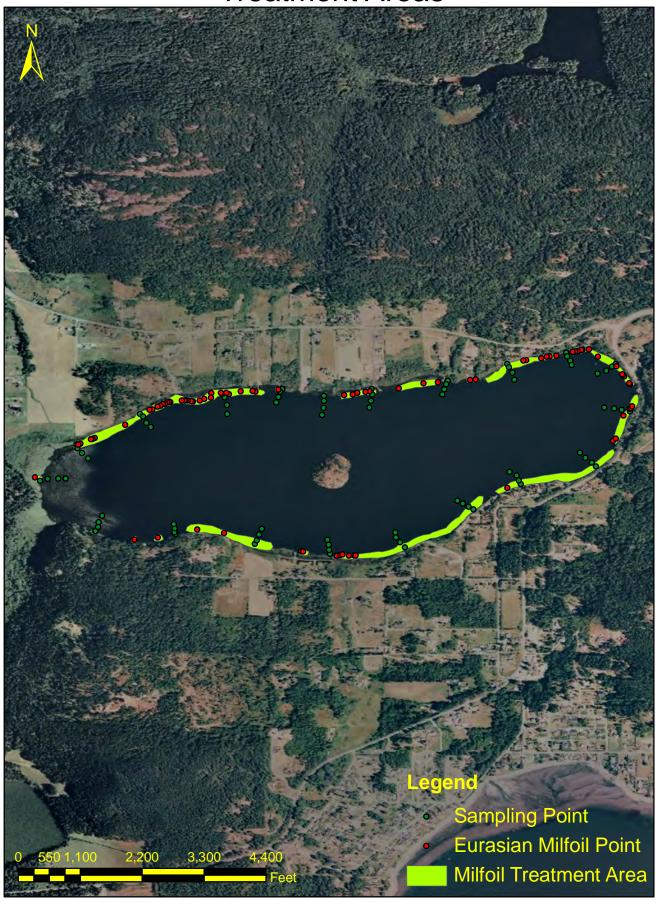
Campbell Lake Skagit County, June 2009



Erie Lake, Skagit County June 2009



Campbell Lake Skagit County, June 2009 Treatment Areas



Aquatic Herbicide Treatment Business and Residential Notice

Distribution Date: <u>July 9th</u>, 2009

<u>Lake Erie</u> will be treated with Aquatic Herbicide. Treatments will take place on or about July 20th – 20th (weather dependant), 2009. Follow up treatments may occur at two week intervals.

The Product(s) that may be applied are: Renovate OTF* Granular (Active ingredient Triclopyr.): Do not use treated water for irrigation until levels reach below 1 ppb which is generally 3-5 days post treatment, The Department of Ecology has established a 24-hour swimming advisory for Renovate OTF*.; 2,4 D (active ingredient: 2,4 – Dicholophenoxyacetic acid): Do not irrigate crop or ornamental plants until levels are below 0.1 ppm; no potable use until levels reach a concentration of 0.07 or less. AquaPro (active ingredient: Glyphosate). No restrictions on the use of water for irrigation, recreation or domestic purposes.

The location of the treatments will be the littoral zone of Lake Erie.

Treated and potentially affected areas will be posted the day of application. The signs will describe any water use restrictions.

If you are withdrawing water for potable or domestic use, livestock watering or irrigation and have <u>no alternative</u> water source. Please contact the applicator Aquatechnex, LLC at 360-508-1276 to arrange an alternative water supply.

If you would like to request additional notification prior to treatment, or have further questions, please contact AquaTechnex using the information above. You may also visit our web site at www.aquatechnex.com, the customer service section, knowledge base for additional day of treatment information. Please visit www.erieandcampbelllmd.wordpress.com for additional information.

This herbicide treatment is regulated under a permit from the Washington Department of Ecology.

Aquatic Herbicide Treatment Business and Residential Notice

Distribution Date: <u>July 10th</u>, 2009

<u>Lake Campbell</u> will be treated with Aquatic Herbicide. Treatments will take place on or about July 21th – 31st (weather dependant), 2009.

The Product(s) that may be applied are: Renovate OTF* Granular (Active ingredient Triclopyr.): Do not use treated water for irrigation until levels reach below 1 ppb which is generally 3-5 days post treatment, The Department of Ecology has established a 24-hour swimming advisory for Renovate OTF*.; 2,4 D (active ingredient: 2,4 – Dicholophenoxyacetic acid): Do not irrigate crop or ornamental plants until levels are below 0.1 ppm; no potable use until levels reach a concentration of 0.07 or less.

The location of the treatments will be the littoral zone of Lake Campbell.

<u>Treated and potentially affected areas will be posted the day of application. The signs will describe any water use restrictions.</u>

If you are withdrawing water for potable or domestic use, livestock watering or irrigation and have <u>no alternative</u> water source. Please contact the applicator Aquatechnex, LLC at 360-508-1276 to arrange an alternative water supply.

If you would like to request additional notification prior to treatment, or have further questions, please contact AquaTechnex using the information above. You may also visit our web site at www.aquatechnex.com, the customer service section, knowledge base for additional day of treatment information. Please visit www.erieandcampbelllmd.wordpress.com for additional information.

This herbicide treatment is regulated under a permit from the Washington Department of Ecology.

Specimen Label

Renovate OTF

Aquatic Herbicide



Aquatic Sites: For control of emersed, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow.

For use in New York State, comply with Section 24(c) Special Local Need labeling for Renovate® OTF, SLN NY-070004

Active Ingredient:

triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid,
triethylamine salt14.0%
Other Ingredients86.0%
TOTAL
Acid equivalent: triclopyr - 10.0%.

Keep Out of Reach of Children CAUTION/PRECAUCIÓN

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.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes moderate eye irritation. Avoid contact with eyes or clothing.

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.

First Aid					
If in eyes	 Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 				
If on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice. 				
If swallowed	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. 				
If inhaled	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 				
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.					

involving this product, call INFOTRAC at 1-800-535-5053.

Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer", "Inherent Risks of Use", and "Limitation of

In case of emergency endangering health or the environment

If you wish to obtain additional product information, please visit our web site at **www.sepro.com**.

Remedies" at end of label booklet. If terms are unacceptable,

EPA Reg. No. 67690-42 FPL 011808

return at once unopened.

Renovate is a registered trademark of Dow AgroSciences LLC.

Manufactured by: **SePRO Corporation** 11550 North Meridian Street, Suite 600 Carmel, IN 46032 U.S.A.

ENVIRONMENTAL HAZARDS

Under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may cause fish suffocation. Therefore, to minimize this hazard **DO NOT** treat more than one-half (1/2) of the water area in a single operation and wait at least 10 days between treatments when susceptible plants are mature and have grown to the water's surface, or when the treatment would result in significant reductions in total plant biomass. 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.

AGRICULTURAL CHEMICAL: Do not ship or store with food, feeds, drugs or clothing.

Directions for Use

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

Read all Directions for Use carefully before applying.

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.

General Information

When applying this product follow all applicable use directions, precautions and limitations.

For Aquatic and Wetland Sites: Use Renovate OTF Granular herbicide for control of emersed, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow.

Obtain Required Permits: Consult with appropriate state or local water authorities before applying this product in and around public waters. State or local public agencies may require permits.

Recreational Use of Water in Treatment Area: There are no restrictions on use of water in the treatment area for recreational purposes, including swimming and fishing.

Livestock Use of Water from Treatment Area: There are no restrictions on livestock consumption of water from the treatment area.

GENERAL USE PRECAUTIONS AND RESTRICTIONS

Chemigation: Do not apply this product through any type of irrigation system.

Irrigation: Water treated with Renovate OTF may not be used for irrigation purposes for 120 days after application or until triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less. This label describes both required and recommended uses of a chemical analysis for the active ingredient, triclopyr. SePRO Corporation recommends the use of an Enzyme-Linked Immunoassay (ELISA) test for the determination of the active ingredient concentration in water. Contact SePRO Corporation for the incorporation of this analysis in your treatment program. Other proven chemical analysis for the active ingredient may also be used. The ELISA analysis is referenced in this label as the preferred method for the rapid determination of the concentration of the active ingredient in the water.

- Seasonal Irrigation Waters: Renovate OTF may be applied during the off-season to surface waters that are used for irrigation on a seasonal basis, provided that there is a minimum of 120 days between Renovate OTF application and the first use of treated water for irrigation purposes or until triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

- Irrigation Canals/Ditches: Do not apply Renovate OTF to irrigation canals/ditches unless the 120 day restriction on irrigation water usage can be observed or triclopyr residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.
- There is no restriction on use of treated water to irrigate established grasses.
- Do not apply Renovate OTF directly to, or otherwise permit it to come into direct contact with grapes, tobacco, vegetable crops, flowers, or other desirable broadleaf plants, and do not permit dust to drift into these areas.
- Do not apply to salt water bays or estuaries.
- Do not apply directly to un-impounded rivers or streams.
- Do not apply on ditches or canals currently being used to transport irrigation water or that will be used for irrigation within 120 days following treatment or until triclopyr residue levels are determined to be 1.0 ppb or less.
- Do not apply where runoff water may flow onto agricultural land as injury to crops may result.

Grazing and Haying Restrictions:

Except for lactating dairy animals, there are no grazing restrictions following application of this product.

- Grazing Lactating Dairy Animals: Do not allow lactating dairy animals to graze treated areas until the next growing season following application of this product.
- 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.

Slaughter Restrictions: During the season of application, withdraw livestock from grazing treated grass at least 3 days before slaughter.

BEST MANAGEMENT PRACTICES FOR DRIFT MANAGEMENT

Equipment used in the application of Renovate OTF should be carefully calibrated to be sure it is working properly and delivering a uniform distribution pattern. Aerial application should be made only when the wind velocity is 2 to 10 mph.

Applications should be made only when there is little or no hazard for volatility or dust drift, and when application can maintain Renovate OTF placement in the intended area. Very small quantities of dust, which may not be visible, may seriously injure susceptible plants, and Renovate OTF may be blown outside of the intended treatment area under extreme conditions. **Do not** spread Renovate OTF when wind is blowing toward susceptible crops or ornamental plants that are near enough to be injured.

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

Ground Application Equipment: To aid in reducing drift, Renovate OTF should be applied when wind velocity is low (follow state regulations; see *Sensitive Area* under *Aerial Drift Reduction Advisory* below) or using a slurry injection system.

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and does not supersede the mandatory label requirements.

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 drift potential.

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 (e.g. higher wind).

Wind: Drift potential is lowest between wind speeds of 2 - 10 mph (follow state regulations). However, many factors, including equipment type, determine drift potential at any given speed. Application 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 drift.

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

AQUATIC WEEDS CONTROLLED BY RENOVATE OTF

alligatorweed pennywort

American lotus smartweed
bladderwort water chestnut^{1, 17}

Eurasian watermilfoil yellow water lily (Nuphar spp., spatterdock)

milfoil species white water lily (*Nymphaea* spp.) parrotfeather^{††} water primrose (*Ludwigia* spp.) pickerelweed watershield (*Brasenia* spp.)

Application Methods

Surface Application

Use a mechanical spreader such as a fertilizer spreader or mechanical seeder, or similar equipment capable of uniformly applying Renovate OTF. Before spreading any product, carefully calibrate the application equipment. When using boats and power equipment, you must determine the proper combination of (1) boat speed, (2) rate of delivery from the spreader, and (3) width of swath covered by the granules.

Use the following formula to calibrate the spreader's delivery in pounds of Renovate OTF per minute:

 $\frac{\text{miles per hour x swath width (feet) x pounds per acre}}{495} = \text{pounds per minute}$

Aerial Application (Helicopter Only)

Ensure uniform application. All equipment should be properly calibrated using blanks with similar physical characteristics to Renovate OTF. To avoid streaked, uneven or overlapped application, use an appropriate tracking device (e.g. GPS). Refer to the *Aerial Drift Reduction Advisory* section of this label for additional precautions and instructions for aerial application.

Floating and Emersed Weeds

For control of water lily's (*Nymphaea* spp. and *Nuphar* spp.), watershield (*Brasenia* spp.), and other susceptible emersed and floating herbaceous weeds, apply 1.0 to 2.5 ppm a.e. triclopyr per acre. Apply when plants are actively growing.

Use higher rates in the rate range when plants are mature, when the weed mass is dense, in areas of greater water exchange, or for difficult to control species. Repeat as necessary to control regrowth, but do not exceed a total of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

Submersed Weeds

For control of Eurasian watermilfoil (*Myriophyllum spicatum*) and other susceptible submersed weeds in ponds, lakes, reservoirs, impounded rivers, streams, and other bodies of water that are quiescent; non-irrigation canals, and seasonal irrigation waters, or ditches that have little or no continuous outflow, apply Renovate OTF using mechanical or portable granule spreading equipment. Rates should be selected according to the rate chart below to provide a triclopyr concentration of 0.50 to 2.5 ppm a.e. in treated water. Use of higher rates in the rate range is recommended in areas of greater water exchange. These areas may require a repeat application. However, total application

of Renovate OTF must not exceed an application rate of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

For optimal control, apply when Eurasian watermilfoil or other submersed weeds are actively growing.

Concentration of Triclor	oyr Acid in Water (ppm a.e.)
	Jyi Aciu iii walei (ppiii a.c.)

	Pounds Renovate OTF / acre							
Avg. Water Depth (ft)	0.5 ppm	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 ppm		
1	14	20	27	41	54	67		
2	27	41	54	81	108	135		
3	41	61	81	122	162	202		
4	54	81	108	162	216	270		

For applications greater in depth than 4 feet, when targeting difficult to control species and/or in sites with high dilution potential, the following formula should be used to calculate applications rates should greater than 270 pounds of Renovate OTF be needed to achieve desired weed control. **NOTE: Do not** exceed 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

average depth x target ppm x 27 = pounds of Renovate OTF per acre

Example Calculation:

6 foot average depth x 2.5 ppm x 27 = 405 pounds of Renovate OTF per acre

SMALL SITE (LESS THAN 1/2 ACRE) / SPOT TREATMENT APPLICATION

For small treatment sites of 1/2 acre or less use the rate chart below to determine the application rate depending on average water depth to achieve a concentration of 1.25 to 2.5 ppm a.e. Do not exceed 2.5 ppm a.e. triclopyr for the treatment area per annual growing season. Use higher rates in small treatment areas and in areas prone to higher dilution and for heavy weed infestation. Use the lower rates for spot treatment application of areas less prone to dilution and lighter weed infestations. For best results, split the total application rate into three equal applications 8 to 12 hours apart. Apply when water is calm.

Example: A 100 ft. by 40 ft. lakeshore swimming area with a 4 ft. average depth, heavily infested with Eurasian watermilfoil

Step 1: Determine the area to be treated in square feet (ft²) by multiplying the length of the area by the width.

-100 ft. x 40 ft. = 4,000 ft²

Step 2: Determine the amount of Renovate OTF to be used by consulting the Renovate OTF Rate Chart for Areas Less than 1/2 Acre.

 Use 24.7 lbs. of Renovate OTF total based on 4 foot average depth in Rate Chart below.

Step 3: Apply Renovate OTF uniformly over weeds in treatment site in three equal applications of 8.2 lbs. each, 8 - 12 hours apart.

Renovate OTF Rate Chart for Areas Less than 1/2 Acre

	Pounds Renovate OTF					
Area (ft²)	3 foot ave	rage depth	depth 4 foot average depth			
	1.25 ppm a.e. 2.5 ppm a.e.		1.25 ppm a.e.	2.5 ppm a.e.		
500	1.2	2.3	1.5	3.0		
1,000	2.3	4.6	3.1	6.1		
4,000	9.3	18.6	12.4	24.7		
10,000	23.2	46.5	31.0	61.9		
20,000	46.5	93.0	62.0	123.9		

For applications with an area or depth not included in the above chart, the following formula should be used to calculate application rates.

area $(ft^2)/43,560 x$ average depth x target ppm x 27 = pounds of Renovate OTF

[†] Not for use in California.

^{**}Retreatment may be needed to achieve desired level of control.

Example Calculation:

 $8,250 \text{ ft}^2/43,560 \times 4 \text{ foot average depth } \times 1.25 \text{ ppm } \times 27 = 25.6 \text{ pounds of } \text{Renovate OTF}$

Small treatment application of Renovate OTF is recommended with waterproof gloves or a hand spreader to uniformly distribute flakes on target weeds.

Precautions for Potable Water Intakes:

For applications of Renovate OTF to control floating, emersed, and submersed weeds in sites that contain a functioning potable water intake for human consumption, see the chart below to determine the minimum setback distances of the application from the functioning potable water intakes.

Concentration of Triclopyr Acid in Water (ppm a.e.)

	Required Setback Distance (ft) from Potable Water Intake						
Area Treated (acres)	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 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 a setback using the formula for the appropriate rate	Setback (ft) = (800*In (acres) – 160) /3.33	Setback (ft) = (800*In (acres) - 160) /2.50	Setback (ft) = (800*In (acres) – 160) /1.67	Setback (ft) = (800*In (acres) – 160) /1.25	Setback (ft) = (800*In (acres) – 160)		

Note: In = natural logarithm **Example Calculation 1:**

to apply 2.5 ppm Renovate OTF to 50 acres:

Setback in feet =
$$(800 \times 1n (50 \text{ acres}) - 160$$

= $(800 \times 3.912) - 160$
= 2970 feet

Example Calculation 2:

to apply 0.75 ppm Renovate OTF to 50 acres:

Setback in feet
$$= \underbrace{\frac{(800 \text{ x In (50 acres)} - 160}{3.33}}_{= \underbrace{(800 \text{ x 3.912}) - 160}_{3.33}}_{= 892 \text{ feet}}$$

Note: Existing potable water intakes which are no longer in use, such as those replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.

To apply Renovate OTF around and within the distances noted above from a functioning potable water intake, the intake must be turned off until the triclopyr level in the intake water is determined to be 0.4 parts per million (ppm) or less by laboratory analysis or immunoassav.

WETLAND SITES

Wetlands include flood plains, deltas, marshes, swamps, bogs, and transitional areas between upland and lowland sites. Wetlands may occur within forests, wildlife habitat restoration and management areas and similar sites as well as areas adjacent to or surrounding domestic water supply reservoirs, lakes and ponds.

For control of emersed, floating or submersed aquatic weeds in wetland sites, follow use directions and application methods associated with the Floating and Emersed Weeds or Submersed Weeds sections on this label.

Use Precautions

Minimize unintentional application to open water when treating target vegetation in wetland sites. **Note:** Consult local public water control authorities before applying this product in and around public water. Permits may be required to treat such areas.

IF ANY CONTENT ON THIS LABEL IS NOT UNDERSTOOD, OR YOU NEED FURTHER ASSISTANCE, CONTACT A SEPRO AQUATIC SPECIALIST WITH QUESTIONS SPECIFIC TO YOUR APPLICATION.

Terms and Conditions of Use

If terms of the following *Warranty Disclaimer, Inherent Risks of Use,* and *Limitation of Remedies* are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under *Warranty Disclaimer, Inherent Risks of Use* and *Limitations of Remedies*.

Warranty Disclaimer

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

Inherent Risks of Use

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

Limitation of Remedies

To the fullest extent permitted by law, SePRO Corporation shall not be liable for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

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

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

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

Storage and Disposal

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited.

Pesticide Storage: Store in original container. Do not store near food or feed. In case of leak or spill, contain material and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal (Plastic Bags): Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

Specimen Label



For aquatic weed and brush control. For control of annual and perennial weeds and woody plants in and around aquatic and other non-crop sites; also for use in wildlife habitat areas, for perennial grass release, and grass growth suppression.

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops, desirable plants and trees, because severe injury or destruction may result.

Keep Out of Reach of Children CAUTION / PRECAUCIÓN

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.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Inhaled

Avoid breathing spray mist. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

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.

First Aid	
If inhaled	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

EMERGENCY NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency endangering health or the environment involving this product, call **INFOTRAC** at **1-800-535-5053**.

Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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.

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

Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer," Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.

For product information, visit our web site at www.sepro.com.

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

EPA Reg. No. 62719-324-67690 EPA Est. No .67690-IN-001 FPL071306

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ENVIRONMENTAL HAZARDS

Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

In case of leak or spill, soak up and remove to a landfill.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

Do not mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas, which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Directions for Use

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

This is an end-use product. SePRO Corporation does not intend and has not registered it for reformulation. See individual container label for repackaging limitations.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- · Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

GENERAL INFORMATION

(How this product works)

This product herbicide is a water-soluble liquid, which mixes readily with water and nonionic surfactant to be applied as a foliar spray for the control or destruction of many herbaceous and woody plants. AquaPro is intended for control of annual and perennial weeds and woody plants in and around aquatic and other non-crop sites; also for use in wildlife habitat areas, for perennial grass release and grass growth suppression.

The active ingredient in AquaPro moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, 7 days or more on most perennial weeds, and 30 days or more on most woody plants. Extremely cool or cloudy weather following treatment may slow the activity of this product and delay visual effects of control. Visible effects include gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise directed on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the *Weeds Controlled* section of this label.

Unemerged plants arising from unattached underground rhizomes or root stocks of perennials or brush will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds or brush is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of AquaPro and surfactant within the recommended range when vegetation is heavy or dense, when treating dense multi-canopied sites or woody vegetation or difficult-to-control herbaceous or woody plants.

Do not treat weeds, brush or trees under poor growing conditions such as drought stress, disease or insect damage, as reduced control may result. Reduced control of target vegetation may also occur if foliage is heavily covered with dust at the time of treatment.

Reduced control may result when applications are made to woody plants or weeds following site disturbance or plant top growth removal from grazing, mowing, logging or mechanical brush control. For best results, delay treatment of such areas until resprouting and foliar growth has restored the target vegetation to the recommended stage of growth for optimum herbicidal exposure and control.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

AquaPro does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

NOTE: The maximum rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed the maximum use rates.

<u>Grazing Restrictions:</u> This product may be used to treat undesirable vegetation in aquatic and other non-crop sites that are being grazed. For tank-mix applications, comply with all restrictions appearing on the tank-mix product label.

Except for lactating dairy animals there are no grazing restrictions following the labeled applications of this product.

For lactating dairy animals there are no grazing restrictions for the following labeled applications of this product:

- Where the spray can be directed onto undesirable woody brush and trees, such as in handgun spray-to-wet or low volume directed spray treatments.
- For tree injection of frill applications and for cut stump treatments.

For broadcast applications, observe the following restrictions for lactating dairy animals:

- For application rates of greater than 4.5 but not to exceed
 7.5 quarts per acre, no more than 15 percent of the available grazing area may be treated.
- For application rates that do not exceed 4.5 quarts per acre, no more than 25 percent of the available grazing area may be treated.

These restrictions do not apply to pastures, rangeland or forestry sites outside of utility rights-of-way.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. When not in use, keep container closed to prevent spills and contamination.

Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product or other materials that are not expressly recommended in this label. Mixing this product with herbicides or other materials not recommended in this label may result in reduced performance.

ATTENTION: Avoid drift. Extreme care must be used when applying this product to prevent injury to desirable plants and crops.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of plant or crop injury occurring from the use of this product is

greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **Avoid applying at excessive speed or pressure.**

SPRAY DRIFT MANAGEMENT

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 to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 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 should be observed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory Information.**

Importance of 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 Inversion section of this label).

<u>Controlling Droplet Size:</u> Volume-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows product larger droplets.

- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- 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 larger droplets than other nozzle types.

- **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 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.).

<u>Wind:</u> 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. Application 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 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 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 smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

<u>Sensitive Areas:</u> 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).

MIXING AND APPLICATION INSTRUCTIONS

Apply these spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes. Hand-gun applications should be properly directed to avoid spraying desirable plants. Note: reduced results may occur if water containing soil is used, such as water from ponds and unlined ditches.

MIXING

AquaPro mixes readily with water. Mix spray solutions of this product as follows:

- 1. Fill the mixing or spray tank with the required amount of water while adding the required amount of this product (see *Directions for Use* and *Weeds Controlled* sections of this label).
- Near the end of the filling process, add the required surfactant and mix well. Remove hose from tank immediately after filling to avoid siphoning back into the water source.

Note: If tank-mixing with Renovate® 3 herbicide, ensure that Renovate® 3 is well mixed with at least 75 percent of the total spray volume before adding AquaPro to the spray tank to avoid incompatibility.

During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, place the filling hose below the surface of the spray solution (only during filling), terminate by-pass and return lines at the bottom of the tank, and, if needed, use an approved anti-foam or defoaming agent.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select correct nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

IMPORTANT: When using this product, unless otherwise specified, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Use a nonionic surfactant labeled for use with herbicides. The surfactant must contain 50 percent or more active ingredient.

Always read and follow the manufacturer's surfactant label recommendations for best results.

Colorants or marking dyes approved for use with herbicides may be added to spray mixtures of this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's label recommendations.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water and dispose of rinsate according to labeled use or disposal instructions.

Carefully observe all cautionary statements and other information appearing in the surfactant label.

APPLICATION EQUIPMENT AND TECHNIQUES

ATTENTION: AVOID DRIFT. EXTREME CARE MUST BE EXERCISED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to crops, plants, or other areas on which the treatment was not intended. The likelihood of plant or crop injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.**

Note: Use of this product in a manner not consistent with this label may result in injury to persons, animals, or crops, or other unintended consequences. When not in use, keep container closed to prevent spills and contamination.

AERIAL EQUIPMENT

Do not aerially apply this product in the state of California.

For control of weed or brush species listed in this label using aerial application equipment: For aerial broadcast application, unless otherwise specified, apply the rates of AquaPro and surfactant recommended for broadcast application in a spray volume of 3 to 20 gallons of water per acre. See the Weeds Controlled section of this label for labeled annual and herbaceous weeds and woody plants and broadcast rate recommendations. Aerial applications of this product may only be made as specifically recommended in this label.

<u>Utility Rights-of-Way Sites:</u> It is recommended that AquaPro be applied by helicopter only in forestry sites and utility rights-of-way. Apply the rate of AquaPro and surfactant recommended for broadcast sprays in a spray volume of 5 to 30 gallons per acre.

AVOID DRIFT. Do not apply during inversion conditions, when winds are gusty or under any other condition which will allow drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing in the additive label. The use of a drift control agent for conifer and herbaceous release applications may result in conifer injury and is not recommended.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. *Prolonged exposure of this product to uncoated steel surfaces may result in corrosion and possible failure of the part. Landing gear are most susceptible.* The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

GROUND BROADCAST EQUIPMENT

For control of weed or brush species listed in this label using conventional boom equipment: For ground broadcast application, unless otherwise specified, apply the rates of AquaPro and surfactant recommended for broadcast application in a spray volume of 3 to 30 gallons of water per acre. See the Weeds Controlled section of this label for labeled annual and herbaceous weeds and woody plants and broadcast rate recommendations. As density of vegetation increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select correct nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

Forestry and Utility Rights-of-Way Sites: AquaPro is recommended for broadcast applications using suitable ground equipment in forestry sites, utility sites, and utility rights-of way. Apply the recommended rates of AquaPro and surfactant in a spray volume of 10 to 60 gallons per acre. Check for even distribution of spray droplets.

HAND-HELD AND HIGH-VOLUME EQUIPMENT (USE COARSE SPRAYS ONLY)

For control of weeds listed in this label using knapsack sprayers or high-volume spraying equipment utilizing handguns or other suitable nozzle arrangements:

<u>High volume sprays:</u> Prepare a *3/4 to 2 percent solution* of this product in water, add a nonionic surfactant and apply to foliage of vegetation to be controlled. For specific rates of application and instructions for control of various annual and perennial weeds, see the *Weeds Controlled* section in this label.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff.

Low volume directed sprays: AquaPro may be used as a 5 to 10 percent solution in low-volume directed sprays for spot treatment of trees and brush. This treatment method is most effective in areas where there is a low density of undesirable trees or brush. If a straight stream nozzle is used, start the application at the top of the targeted vegetation and spray from top to bottom in a lateral zig-zag motion. Ensure that at least 50 percent of the leaves are contacted by the spray solution.

For flat fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. Small, open-branched trees need only be treated from one side. If the foliage is thick or there are multiple root sprouts, applications must be made from several sides to ensure adequate spray coverage.

Prepare the desired volume of spray solution by mixing the amount of this product in water, shown in the following table:

	Amount of AquaPro								
Desired Volume	34%	1%	1¼%	1½%	2%	5%	8%	10%	
1 gal	1 fl oz	1⅓ fl oz	1⅔ fl oz	2 fl oz	2½ fl oz	6½ fl oz	10¼ fl oz	12¾ fl oz	
25 gal	1½ pt	1 qt	1¼ qt	1½ qt	2 qt	5 qt	2 gal	2.5 gal	
100 gal	3 qt	1 gal	1¼ gal	1½ gal	2 gal	5 gal	8 gal	10 gal	

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill the knapsack sprayer with the mixed solution and add the correct amount of surfactant.

SELECTIVE EQUIPMENT

This product may be applied through shielded sprayers or wiper application equipment. This equipment may be used to selectively control undesirable vegetation without harming desirable vegetation.

Shielded sprayers direct the herbicide solution onto weeds while shielding desirable vegetation from the spray solution. Any recommended rate or tank mixture of this product may be used employing this equipment.

Wiper Applications

Wiper applicators physically wipe product directly onto undesirable vegetation. Care should be taken to avoid wiping desirable vegetation. Use a 33 to 100 percent solution of this product, diluted in water for wiper applications. Use a 33 percent solution for wick or gravity feed systems. Higher concentrations may be used in pressurized systems that are capable of handling thicker solutions. Addition of a nonionic surfactant at a rate of 10 percent by volume of total herbicide solution is recommended.

Wiper applications can be used to control or suppress annual and perennial weeds listed on this label. In heavy weed stands, a double application in opposite directions may improve results. See the *Weed Controlled* section in this label for recommended timing, growth stage and other instructions for achieving optimum results.

Cut Stump Application

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with this product. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. Apply a 50 to 100 percent solution of this product to freshly cut surface immediately after cutting. Delay in applying this product may result in reduced performance. For best results, trees should be cut during periods of active growth and full leaf expansion.

When used according to directions for cut stump application, this product will **control**, **partially control or suppress** most woody brush and tree species, some of which are listed below:

Common Name	Scientific Name
Alder	Alnus spp.

Coyote brush † Baccharis consanguinea

Dogwood †Cornus spp.EucalyptusEucalyptus spp.Hickory †Carya spp.MadroneArbutus menziesii

Maple † Acer spp.
Oak Quercus spp.
Poplar † Populus spp.
Reed, giant Arundo donax
Salt cedar Tamarix spp.

Sweet gum † Liquidambar styraciflua
Sycamore † Platanus occidentalis
Tan oak Lithocarpus densiflorus

Willow Salix spp.

Injection and Frill Applications

Woody vegetation may be controlled by injection or frill application of this product. Apply this product using suitable equipment which must penetrate into living tissue. Apply the equivalent of 1 ml of this product per 2 to 3 inches of trunk diameter. This is best achieved by applying 25 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying dilute material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frill or cut areas in species that exude sap freely after frills or cutting. In species such as these, make frill or cut at an oblique angle so as to produce a cupping effect and use undiluted material. For best results, applications should be made during periods of active growth and full leaf expansion.

This treatment will CONTROL the following woody species:

Common NameScientific NameOakQuercus spp.PoplarPopulus spp.

Sweet gum Liquidambar styraciflua Sycamore Platanus occidentalis

[†] AquaPro is not approved for this use on these species in the state of California.

This treatment will SUPPRESS the following woody species:

Common NameScientific NameBlack gum †Nyssa sylvaticaDogwoodCornus spp.HickoryCarya spp.Maple, redAcer rubrum

WEEDS CONTROLLED Annual Weeds

Common Name

Horseweed/Marestail

Apply to actively growing annual grasses and broadleaf weeds.

Allow at least 3 days after application before disturbing treated vegetation. After this period the weeds may be mowed, tilled or burned. See *Directions for Use, General Information* and *Mixing and Application Instructions* for labeled uses and specific application instructions.

Broadcast Application Rates: Use 1 1/2 pints of this product per acre plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution if weeds are less than 6 inches tall. If weeds are greater than 6 inches tall, use 2 1/2 pints of this product per acre plus 2 or more quarts of an approved nonionic surfactant per 100 gallons of spray solution.

Hand-Held, High-Volume Application Rates: Use a 3/4 percent solution of this product in water plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution and apply to foliage of vegetation to be controlled.

Scientific Name

Conyza canadensis

When applied as directed, AquaPro plus nonionic surfactant will control the following annual weeds:

Momordica charantia Balsamapple † Hordeum vulgare Barley Barnyardgrass Echinochloa crus-galli Bassia, fivehook Bassia hyssopifolia Bluegrass, annual Poa annua Bluegrass, bulbous Poa bulbosa **Brome** Bromus spp. Ranunculus spp. Buttercup Cheat Bromus secalinus Chickweed, mouseear Cerastium vulgatum Cocklebur Xanthium strumarium Corn. volunteer Zea mays Crabgrass Digitaria spp. Dwarfdandelion Krigia cespitosa Falseflax, smallseed Camelina microcarpa Fiddleneck Amsinckia spp. Flaxleaf fleabane Conyza bonariensis Fleabane Erigeron spp. Foxtail Setaria spp. Foxtail. Carolina Alopecurus carolinianus Groundsel, common Senecio vulgaris

Kochia Kochia scoparia Lambsquarters, common Chenopodium album Lettuce, prickly Lactuca serriola Morningglory Ipomoea spp. Mustard, blue Chorispora tenella Mustard, tansy Descurainia pinnata Sisymbrium altissimum Mustard, tumble Mustard, wild Sinapis arvensis Oats, wild Avena fatua Panicum Panicum spp. Pennycress, field Thlaspi arvense Pigweed, redroot Amaranthus retroflexus Amaranthus hybridus Pigweed, smooth Ragweed, common Ambrosia artemisiifolia Ambrosia trifida Ragweed, giant Rocket, London Sisymbrium irio Secale cereale Rye Ryegrass, Italian ** Lolium multiflorum Sandbur, field Cenchrus spp. Shattercane Sorghum bicolor Shepherd's-purse Capsella bursa-pastoris Signalgrass, broadleaf Brachiaria platyphylla Smartweed, Pennsylvania Polygonum pensylvanicum Sowthistle, annual Sonchus oleraceus Spanishneedles # Bidens bipinnata Stinkgrass Eragrostis cilianensis Sunflower Helianthus annuus Thistle, Russian Salsola kali Spurry, umbrella Holosteum umbellatum Velvetleaf Abutilon theophrasti Wheat Triticum aestivum

Vitchgrass

† Apply with hand-held equipment only.

† Apply 3 pints of this product per acre.

Annual weeds will generally continue to germinate from seed throughout the growing season. Repeat treatments will be necessary to control later germinating weeds.

Panicum capillare

Perennial Weeds

Apply AquaPro to control most vigorously growing perennial weeds. Unless otherwise directed, apply when target plants are actively growing and most have reached early head or early bud stage of growth. Unless otherwise directed, allow at least 7 days after application before disturbing vegetation.

NOTE: If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

Specific Weed Control Recommendations: For perennial weeds, apply the recommended rate plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. See the General Information, Directions for Use and Mixing and Application sections in this label for specific uses and application instructions.

[†] AquaPro is not approved for this use on these species in the state of California.

When applied as directed, AquaPro plus nonionic surfactant will control the following perennial weeds:

(Numbers in parentheses "(-)" following common name of a listed weed species refer to Specific Perennial Weed Control Recommendations for that weed which follow the species listing.)

Common Name

Alfalfa (31)

Alligatorweed † (1)

Anise/Fennel (31)

Artichoke, Jerusalem (31)

Bahiagrass (31) Bermudagrass (2)

Bindweed, field (3)

Bluegrass, Kentucky (12)

Blueweed, Texas (3) Brackenfern (4)

Bromegrass, smooth (12)

Canarygrass, reed (12)

Cattail (5)

Clover, red (31)

Clover, white (31)

Cogongrass (6)

Cordgrass (7)

Cutgrass, giant † (8)

Dallisgrass (31)

Dandelion (31)

Dock, curly (31) Dogbane, hemp (9)

Fescue (31)

Fescue, tall (10)

Guineagrass (11)

Hemlock, poison (31)

Horsenettle (31)

Horseradish (9)

Ice Plant (22)

Johnsongrass (12)

Kikuyugrass (21)

Knapweed (9)

Lantana (13)

Lespedeza, common (31)

Lespedeza, sericea (31)

Loosestrife, purple (14)

Lotus, American (15) Maidencane (16)

Milkweed (17)

Muhly, wirestem (21)

Mullein, common (31)

Napiergrass (31)

Nightshade, silverleaf (3)

Nutsedge, purple (18)

Nutsedge, yellow (18) Orchardgrass (12)

Pampasgrass (19)

Paragrass (16)

Phragmites^{††} (20)

Quackgrass (21)

Reed, giant (22)

Scientific Name

Medicago sativa

Alternanthera philoxeroides

Foeniculum vulgare

Helianthus tuberosus

Paspalum notatum

Cynodon dactylon Convolvulus arvensis

Poa pratensis

Helianthus ciliaris

Pteridium spp.

Bromus inermis Phalaris arundinacea

Typha spp.

Trifolium pratense

Trifolium repens

Imperata clylindrica

Spartina spp.

Zizaniopsis miliacea

Paspalum dilatatum

Taraxacum officinale

Rumex crispus

Apocynum cannabinum

Festuca spp.

Festuca arundinacea

Panicum maximum

Conium maculatum

Solanum carolinense

Armoracia rusticana

Mesembryanthemum

crystallinum

Sorghum halepense

Pennisetum clandestinum

Centaurea repens

Lantana camara

Lespedeza striata

Lespedeza cuneata

Lythrum salicaria

Nelumbo lutea

Panicum hematomon

Asclepias spp. Muhlenbergia frondosa

Verbascum thapsus

Pennisetum purpureum

Solanum elaeagnifolium

Cyperus rotundus

Cyperus esculentus

Dactylis glomerata

Cortaderia jubata

Brachiaria mutica

Phragmites spp.

Agropyron repens

Arundo donax

Ryegrass, perennial (12) Smartweed, swamp (31)

Spatterdock (23)

Starthistle, yellow (31)

Sweet potato, wild † (24) Thistle, artichoke (25)

Thistle, Canada (25) Timothy (12)

Torpedograss † (26) Tules, common (27)

Vaseygrass (31)

Velvetgrass (31) Waterhyacinth (28)

Waterlettuce (29)

Waterprimrose (30) Wheatgrass, western (12)

Recommendations below

† Partial control. ^{††} Partial control in southeastern states. See Specific Weed Control

Specific Perennial Weed Control Recommendations:

1. Alligatorweed: Apply 6 pints of this product per acre as a broadcast spray or as a 1 1/4 percent solution with hand-held equipment to provide partial control of alligatorweed. Apply when most of the target plants are in bloom. Repeat applications will be required to maintain such control.

Lolium perenne

Nuphar luteum

Polygonum coccineum

Centaurea solstitialis

Ipomoea pandurata

Cynara cardunculus Cirsium arvense

Phleum pratense

Panicum repens

Paspalum urvillei

Eichornia crassipes

Scirpus acutus

Pistia stratiotes

Agropyron smithii

Ludwigia spp.

Holcus spp.

- 2. Bermudagrass: Apply 7 1/2 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with handheld equipment. Apply when target plants are actively growing and when seedheads appear.
- 3. Bindweed, field / Silverleaf Nightshade / Texas Blueweed: Apply 6 to 7 1/2 pints of this product per acre as a broadcast spray west of the Mississippi River and 4 1/2 to 6 pints of this product per acre east of the Mississippi River. With hand-held equipment, use a 1 1/2 percent solution. Apply when target plants are actively growing and are at or beyond full bloom. For silverleaf nightshade, best results can be obtained when application is made after berries are formed. Do not treat when weeds are under drought stress. New leaf development indicates active growth. For best results apply in late summer or fall.
- 4. Brackenfern: Apply 4 1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 to 1 percent solution with hand-held equipment. Apply to fully expanded fronds which are at least 18 inches long.
- 5. Cattail: Apply 4 1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and are at or beyond the early-to-full bloom stage of growth. Best results are achieved when application is made during the summer or fall months.
- 6. Cogongrass: Apply 4 1/2 to 7 1/2 pints of this product per acre as a broadcast spray. Apply when cogongrass is at least 18 inches tall and actively growing in late summer or fall. Allow 7 or more days after application before tillage or mowing. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.

- 7. Cordgrass: Apply 4 1/2 to 7 1/2 pints of this product per acre as a broadcast spray or as a 1 to 2 percent solution with handheld equipment. Schedule applications in order to allow 6 hours before treated plants are covered by tidewater. The presence of debris and silt on the cordgrass plants will reduce performance. It may be necessary to wash targeted plants prior to application to improve uptake of this product into the plant.
- 8. Cutgrass, giant: Apply 6 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment to provide partial control of giant cutgrass. Repeat applications will be required to maintain such control, especially where vegetation is partially submerged in water. Allow for substantial regrowth to the 7 to 10-leaf stage prior to retreatment.
- 9. Dogbane, hemp / Knapweed / Horseradish: Apply 6 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth. For best results, apply in late summer or fall.
- 10. Fescue, tall: Apply 4 1/2 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained.
- **11. Guineagrass:** Apply 4 1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and when most have reached at least the 7-leaf stage of growth.
- 12. Johnsongrass / Bluegrass, Kentucky / Bromegrass, smooth / Canarygrass, reed / Orchardgrass / Ryegrass, perennial / Timothy / Wheatgrass, western: Apply 3 to 4 1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained. In the fall, apply before plants have turned brown.
- **13. Lantana:** Apply this product as a 3/4 to 1 percent solution with hand-held equipment. Apply to actively growing lantana at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.
- 14. Loosestrife, purple: Apply 4 pints of this product per acre as a broadcast spray or as a 1 to 1 1/2 percent solution using hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost.
- 15. Lotus, American: Apply 4 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with handheld equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost. Repeat treatment may be necessary to control regrowth from underground parts and seeds.

- 16. Maidencane / Paragrass: Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Repeat treatments will be required, especially to vegetation partially submerged in water. Under these conditions, allow for regrowth to the 7 to 10-leaf stage prior to retreatment.
- 17. Milkweed, common: Apply 4 1/2 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth.
- 18. Nutsedge; purple, yellow: Apply 4 1/2 pints of this product per acre as a broadcast spray, or as a 3/4 percent solution with hand-held equipment to control existing nutsedge plants and immature nutlets attached to treated plants. Apply when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control.
- **19. Pampasgrass:** Apply a 1 1/2 percent solution of this product with hand-held equipment when plants are actively growing.
- 20. Phragmites: For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 7 1/2 pints per acre as a broadcast spray or apply a 1 1/2 percent solution with hand-held equipment. In other areas of the U.S., apply 4 to 6 pints per acre as a broadcast spray or apply a 3/4 percent solution with hand-held equipment for partial control. For best results, treat during late summer or fall months when plants are actively growing and in full bloom. Due to the dense nature of the vegetation, which may prevent good spray coverage and uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.
- 21. Quackgrass / Kikuyugrass / Muhly, wirestern: Apply 3 to 4 1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment when most quackgrass or wirestem muhly is at least 8 inches in height (3- to 4-leaf stage of growth) and actively growing. Allow 3 or more days after application before tillage.
- 22. Reed, giant / ice plant: For control of giant reed and ice plant, apply a 1 1/2 percent solution of this product with handheld equipment when plants are actively growing. For giant reed, best results are obtained when applications are made in late summer to fall.
- 23. Spatterdock: Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when most plants are in full bloom. For best results, apply during the summer or fall months.
- 24. Sweet potato, wild: Apply this product as a 1 1/2 percent solution using hand-held equipment. Apply to actively growing weeds that are at or beyond the bloom stage of growth. Repeat applications will be required. Allow the plant to reach the recommended stage of growth before retreatment.
- **25. Thistle, Canada / artichoke:** Apply 3 to 4 1/2 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with hand-held equipment for Canada thistle. To control artichoke thistle, apply a 2 percent solution as a spray-to-wet application. Apply when target plants are actively growing and are at or beyond the bud stage of growth.

- 26. Torpedograss: Apply 6 to 7 1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1 1/2 percent solution with hand-held equipment to provide partial control of torpedograss. Use the lower rates under terrestrial conditions, and the higher rates under partially submerged or a floating mat condition. Repeat treatments will be required to maintain such control.
- 27. Tules, common: Apply this product as a 1 1/2 percent solution with hand-held equipment. Apply to actively growing plants at or beyond the seedhead stage of growth. After application, visual symptoms will be slow to appear and may not occur for 3 or more weeks.
- 28. Waterhyacinth: Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a 3/4 to 1 percent solution with hand-held equipment. Apply when target plants are actively growing and at or beyond the early bloom stage of growth. After application, visual symptoms may require 3 or more weeks to appear with complete necrosis and decomposition usually occurring within 60 to 90 days. Use the higher rates when more rapid visual effects are desired.
- 29. Waterlettuce: For control, apply a 3/4 to 1 percent solution of this product with hand-held equipment to actively growing plants. Use higher rates where infestations are heavy. Best results are obtained from mid-summer through winter applications. Spring applications may require retreatment.
- 30. Waterprimrose: Apply this product as a 3/4 percent solution using hand-held equipment. Apply to plants that are actively growing at or beyond the bloom stage of growth, but before fall color changes occur. Thorough coverage is necessary for best control.
- **31. Other perennial weeds listed above:** Apply 4 1/2 to 7 1/2 pints of AquaPro per acre as a broadcast spray or apply as a 3/4 to 1 1/2 percent solution with hand-held equipment.

Woody Brush and Trees

NOTE: If brush has been mowed or tilled or trees have been cut, do not treat until regrowth has reached the recommended stage of growth.

Application Rates and Timing

When applied as a 5 to 8 percent solution as a directed application as described in the *Hand-Held and High-Volume Equipment* section, this product will control or partially control all wood brush and tree species listed in this section of this label. Use the higher rate of application for dense stands and larger woody brush and trees.

Specific Brush or Tree Control Recommendations: Numbers in parentheses "(-)" following the common name of a listed brush or tree species refer to *Specific Brush or Tree Control Recommendations* which follow the species listing. See this section for specific application rates and timing for listed species.

For woody brush and trees, apply the recommended rate plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution when plants are actively growing and, unless otherwise directed, after full-leaf expansion. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth.

Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when application is made in the spring or early summer when brush species are at high moisture content and are flowering. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

Allow 7 or more days after application before tillage, mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

See the *Directions for Use* and *Mixing and Application Instructions* sections in this label for labeled use and specific application instructions.

When applied as directed, AquaPro plus nonionic surfactant will control the following woody brush plants and trees:

(Numbers in parentheses "(-)" following common name of a listed brush or tree species refer to *Specific Brush or Tree Control Recommendations* for that species which follow the species listing.)

Common Name

Alder (1) Ash † (20)

Aspen, quaking (2) Bearclover, Bearmat (20)

Birch (3) Blackberry (1)

Broom, French (4)

Broom, Scotch (4) Buckwheat, California † (5)

Cascara † (20) Catsclaw †(6) Ceanothus (20)

Chamise (17)
Cherry, bitter (7)
Cherry, black (7)
Cherry, pin (7)
Coyote brush (8)

Creeper, Virginia † (20)

Dewberry (1) Dogwood (9) Elderberry (3) Elm † (20)

Eucalyptus, bluegum (10)

Hasardia † (5) Hawthorn (2) Hazel (3) Hickory (9)

Holly, Florida (11) (Brazilian peppertree)

Honeysuckle (1)

Hornbeam, American (20)

Kudzu (12)

Scientific Name

Alnus spp.
Fraxinus spp.
Populus tremuloides
Chamaebatia foliolosa

Betula spp. Rubus spp.

Cytisus monspessulanus

Cytisus scoparius Eriogonum fasciculatum Rhamnus purshiana Acacia greggi Ceanothus spp.

Adenostoma fasciculatum Prunus emarginata Prunus serotina Prunus pensylvanica Baccharis consanguinea Parthenocissus quinquefolia

Rubus trivialis Cornus spp. Sambucus spp. Ulmus spp.

Eucalyptus globulus Haplopappus squamosus

Crataegus spp.
Corylus spp.
Carya spp.

Schinus terebinthifolius

Lonicera spp. Carpinus caroliniana Pueraria lobata Locust, black † (20) Robinia pseudoacacia Manzanita (20) Arctostaphylos spp. Maple, red † (13) Acer rubrum Maple, sugar (14) Acer saccharum Maple, vine † (20) Acer circinatum Monkey flower † (5) Mimulus guttatus Oak, black † (20) Quercus velutina Oak, northern pin (14) Quercus palustris Oak, post (1) Quercus stellata Oak, red (14) Quercus rubra Oak, southern red (7) Quercus falcata Oak, white † (20) Quercus alba Persimmon † (20) Diospyros spp. Poison-ivy (15) Rhus radicans Poison-oak (15) Rhus toxicodendron Poplar, yellow † (20) Liriodendron tulipifera Prunus spp. Prunus (7) Raspberry (1) Rubus spp. Redbud, eastern (20) Cercis canadensis Rose, multiflora (16) Rosa multiflora Russian-olive (20) Elaeagnus angustifolia Sage: black (17), white Salvia spp. Sagebrush, California (17) Artemisia californica Salmonberry (3) Rubus spectabilis Salt cedar † (9) Tamarix spp. Baccharis halimifolia Saltbush, sea myrtle (18) Sassafras (20) Sassafras aibidum Sourwood † (20) Oxydendrum arboreum Sumac, poison † (20) Rhus vernix Sumac, smooth † (20) Rhus glabra Sumac, winged † (20) Rhus copallina Sweetgum (7) Liquidambar styraciflua Swordfern † (20) Polystichum munitum Tallowtree, Chinese (17) Sapium sebiferum Thimbleberry (3) Rubus parviflorus Tobacco, tree † (5) Nicotiana glauca Campsis radicans Trumpetcreeper (2) Waxmyrtle, southern † (11) Myrica cerifera Willow (19) Salix spp.

Specific Brush or Tree Control Recommendations:

- Alder / Blackberry / Dewberry / Honeysuckle / Oak, Post / Raspberry: For control, apply 4 1/2 to 6 pints per acre as a broadcast spray or as a 3/4 to 1 1/4 percent solution with hand-held equipment.
- 2. Aspen, Quaking / Hawthorn / Trumpetcreeper: For control, apply 3 to 4 1/4 pints of this product per acre as a broadcast spray or as a 3/4 to 1 1/4 percent solution with hand-held equipment.
- 3. Birch / Elderberry / Hazel / Salmonberry / Thimbleberry:
 For control, apply 3 pints per acre of this product as a broadcast spray or as a 3/4 percent solution with hand-held equipment.
- **4. Broom, French / Broom, Scotch:** For control, apply a 1 1/4 to 1 1/2 percent solution with hand-held equipment.
- 5. Buckwheat, California / Hasardia / Monkey flower / Tobacco, tree: For partial control of these species, apply a 3/4 to 1 1/2 percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

- **6. Catsclaw:** For partial control, apply a 1 1/4 to 1 1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.
- 7. Cherry, bitter / Cherry, black / Cherry, pin / Oak, southern red / Sweetgum / Prunus: For control, apply 3 to 7 1/2 pints of this product per acre as a broadcast spray or as a 1 to 1 1/2 percent solution with hand-held equipment.
- **8. Coyote brush:** For control, apply a 1 1/4 to 1 1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.
- 9. Dogwood / Hickory / Salt cedar: For partial control, apply a 1 to 2 percent solution of this product with hand-held equipment or 6 to 7 1/2 pints per acre as a broadcast spray.
- 10. Eucalyptus, bluegum: For control of eucalyptus resprouts, apply a 1 1/2 percent solution of this product with hand-held equipment when resprouts are 6 to 12-feet tall. Ensure complete coverage. Apply when plants are actively growing. Avoid application to drought-stressed plants.
- **11. Holly, Florida / Waxmyrtle, southern:** For partial control, apply this product as a 1 1/2 percent solution with hand-held equipment.
- 12. Kudzu: For control, apply 6 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with handheld equipment. Repeat applications will be required to maintain control.
- **13. Maple, red:** For control, apply as a 3/4 to 1 1/4 percent solution with hand-held equipment when leaves are fully developed. For partial control, apply 2 to 7 1/2 pints of this product per acre as a broadcast spray.
- 14. Maple, sugar / Oak: northern pin / Oak, red: For control, apply as a 3/4 to 1 1/4 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.
- 15. Poison-ivy / Poison-oak: For control, apply 6 to 7 1/2 pints of this product per acre as a broadcast spray or as a 1 1/2 percent solution with hand-held equipment. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.
- **16. Rose, multiflora:** For control, apply 3 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Treatments should be made prior to leaf deterioration by leaf-feeding insects.
- 17. Sage, black / Sagebrush, California / Chamise / Tallowtree, Chinese: For control of these species, apply a 3/4 percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.
- **18. Saltbush, sea myrtle:** For control, apply this product as a 1 percent solution with hand-held equipment.
- **19. Willow:** For control, apply 4 1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment.
- 20. Other woody brush and trees listed above: For partial control, apply 3 to 7 1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1 1/2 percent solution with hand-held equipment.

[†] Partial control (See below for control or partial control instructions.)

AQUATIC AND OTHER NON-CROP SITES

Apply AquaPro as directed and under conditions described to control or partially control weeds and woody plants listed in the Weeds Controlled section in industrial, recreational and public areas or other similar aquatic or terrestrial sites on this label.

NON-CROP SITES

AquaPro may be used to control the listed weeds in the following terrestrial non-crop sites and/or in aquatic sites within these areas:

- Airports
- Golf Courses
- Habitat Restoration & Management Areas
- Highways & Roadsides
- Industrial Plant Sites
- Lumberyards
- Parking Areas
- Parks
- Petroleum Tank Farms
- Pipeline, Power, Telephone & Utility Rights-of-Way
- Pumping Installations
- Railroads
- Schools
- Storage Areas
- Similar Sites

AQUATIC SITES

AquaPro may be applied to emerged weeds in all bodies of fresh and brackish water which may be flowing, nonflowing or transient. This includes lakes, rivers, streams, ponds, estuaries, rice levees, seeps, irrigation and drainage ditches, canals, reservoirs, wastewater treatment facilities, wildlife habitat restoration and management areas and similar sites.

If aquatic sites are present in the non-crop area and are part of the intended treatment, read and observe the following directions:

- AquaPro does not control plants which are completely submerged or have a majority of their foliage under water.
- There is no restriction on the use of treated water for irrigation, recreation or domestic purposes.
- Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.
- NOTE: Do not apply this product directly to water within 1/2 mile up-stream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within 1/2 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning

- off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does not apply to intermittent inadvertent overspray of water in terrestrial use sites.
- For treatments after drawdown of water or in dry ditches, allow 7 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after drawdown to ensure application to actively growing weeds.
- Floating mats of vegetation may require retreatment. Avoid wash-off of sprayed foliage by spray boat or recreational boat backwash or by rainfall within 6 hours of application. Do not retreat within 24 hours following the initial treatment.
- Applications made to moving bodies of water must be made
 while traveling upstream to prevent concentration of this
 herbicide in water. When making any bankside applications, do
 not overlap more than 1 foot into open water. Do not spray in
 bodies of water where weeds do not exist. The maximum
 application rate of 7 1/2 pints per acre must not be exceeded in
 any single broadcast application that is being made over water.
- When emerged infestations require treatment of the total surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in fish kill.

WILDLIFE HABITAT RESTORATION AND MANAGEMENT AREAS

AquaPro is recommended for the restoration and/or maintenance of native habitat and in wildlife management areas.

Habitat Restoration and Maintenance: When applied as directed, exotic and other undesirable vegetation may be controlled in habitat management areas. Applications may be made to allow recovery of native plant species, to open up water to attract waterfowl, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments may be made to selectively remove unwanted plants for habitat enhancement. For spot treatments, care should be exercised to keep spray off of desirable plants.

Wildlife Food Plots: AquaPro may be used as a site preparation treatment prior to planting wildlife food plots. Apply as directed to control vegetation in the plot area. Any wildlife food species may be planted after applying this product, or native species may be allowed to reinfest the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling to allow for maximum effectiveness.

RELEASE OF BERMUDAGRASS OR BAHIAGRASS ON NON-CROP SITES

Release Of Dormant Bermudagrass And Bahiagrass:

When applied as directed, this product will provide control or suppression of many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Make applications to dormant bermudagrass or bahiagrass.

For best results on winter annuals, treat when weeds are in an early growth stage (below 6 inches in height) after most have germinated. For best results on tall fescue, treat when fescue is in or beyond the 4- to 6-leaf stage.

WEEDS CONTROLLED

Rate recommendations for control or suppression of winter annuals and tall fescue are listed below.

Apply the recommended rates of this product in 10 to 25 gallons of water per acre plus 2 quarts nonionic surfactant per 100 gallons of total spray volume.

Note: C = Controlled; S = Suppressed

Weeds Controlled or Suppressed †

	Rate of AquaPro (Fluid Ounces Per Acre)					
Weed Species	6	9	12	18	24	48
Barley, little	S	С	С	С	С	С
Hordeum pusillum						
Bedstraw, catchweed	S	С	С	С	С	С
Galium aparine						
Bluegrass, annual	S	С	С	С	С	С
Poa annua						
Chervil	S	С	С	С	С	С
Chaerophyllum taiturieri						
Chickweed, common	S	С	С	С	С	
Stellaria media						
Clover, crimson	•	S	S	С	С	С
Trifolium incarnatum						
Clover, large hop	•	S	S	С	С	С
Trifolium campestre						
Speedwell, corn	S	С	С	С	С	С
Veronica arvensis						
Fescue, tall	•	•	•	•	S	S
Festuca arundinacea						
Geranium, Carolina	•	•	S	S	С	С
Geranium carolinianum						
Henbit	•	S	С	С	С	С
Lamium amplexicaule						
Ryegrass, Italian	•	•	S	С	С	С
Lolium multiflorum						
Vetch, common	•	•	S	С	С	С
Vicia sativa						

[†] These rates apply only to sites where an established competitive turf is present.

RELEASE OF ACTIVELY GROWING BERMUDAGRASS

NOTE: Use only on sites where bahiagrass or bermudagrass are desired for ground cover and some temporary injury or yellowing of the grasses can be tolerated.

When applied as directed, this product will aid in the release of bermudagrass by providing control of annual species listed in the "Weeds Controlled" section in this label, and suppression or partial control of certain perennial weeds.

For control or suppression of those annual species listed in this label, use 3/4 to 2 1/4 pints of this product as a broadcast spray in 10 to 25 gallons of spray solution per acre, plus 2 quarts of a nonionic surfactant per 100 gallons of total spray volume.

Use the lower rate when treating annual weeds below 6 inches in height (or length of runner in annual vines). Use the higher rate as size of plants increases or as they approach flower or seedhead formation.

Use the higher rate for partial control or longer-term suppression of the following perennial species. Use lower rates for shorter-term suppression of growth.

Bahiagrass Johnsongrass †
Dallisgrass Trumpetcreeper ††
Fescue (tall) Vaseygrass

- [†] Johnsongrass is controlled at the higher rate.
- ^{††} Suppression at the higher rate only.

Use only on well-established bermudagrass. Bermudagrass injury may result from the treatment but regrowth will occur under moist conditions. Repeat applications in the same season are not recommended, since severe injury may result.

BAHIAGRASS SEEDHEAD AND VEGETATIVE SUPPRESSION

When applied as directed in the *Non-crop Sites* section in this label, this product will provide significant inhibition of seedhead emergence and will suppress vegetative growth for a period of approximately 45 days with single applications and approximately 120 days with sequential applications.

Apply this product 1 to 2 weeks after full green-up of bahiagrass or after the bahiagrass has been mowed to a uniform height of 3 to 4 inches. Applications must be made prior to seedhead emergence. Apply 5 fluid ounces per acre of this product, plus 2 quarts of an approved nonionic surfactant per 100 gallons of total spray volume in 10 to 25 gallons of water per acre.

Sequential applications of this product plus nonionic surfactant may be made at approximately 45-day intervals to extend the period of seedhead and vegetative growth suppression. For continued vegetative growth suppression, sequential applications must be made prior to seedhead emergence.

Apply no more than 2 sequential applications per year. As a first sequential application, apply 3 fluid ounces of this product per acre plus nonionic surfactant. A second sequential application of 2 to 3 fluid ounces per acre plus nonionic surfactant may be made approximately 45 days after the last application.

ANNUAL GRASS GROWTH SUPPRESSION

For growth suppression of some annual grasses, such as annual ryegrass, wild barley and wild oats growing in coarse turf on roadsides or other industrial areas, apply 3 to 4 ounces of this product in 10 to 40 gallons of spray solution per acre. Mix 2 quarts of a nonionic surfactant per 100 gallons of spray solution. Applications should be made when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments made after seedhead emergence may cause injury to the desired grasses.

Storage and Disposal

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

Pesticide Storage: Store above 10°F (-12°C) to keep product from crystallizing. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk containers to mix well before using.

Pesticide Disposal: Wastes resulting from use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

Container Disposal: Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Do not reuse this container. Triple rinse (or equivalent). Then 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.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

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

Inherent Risks Of Use

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

Limitation of Remedies

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

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

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

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