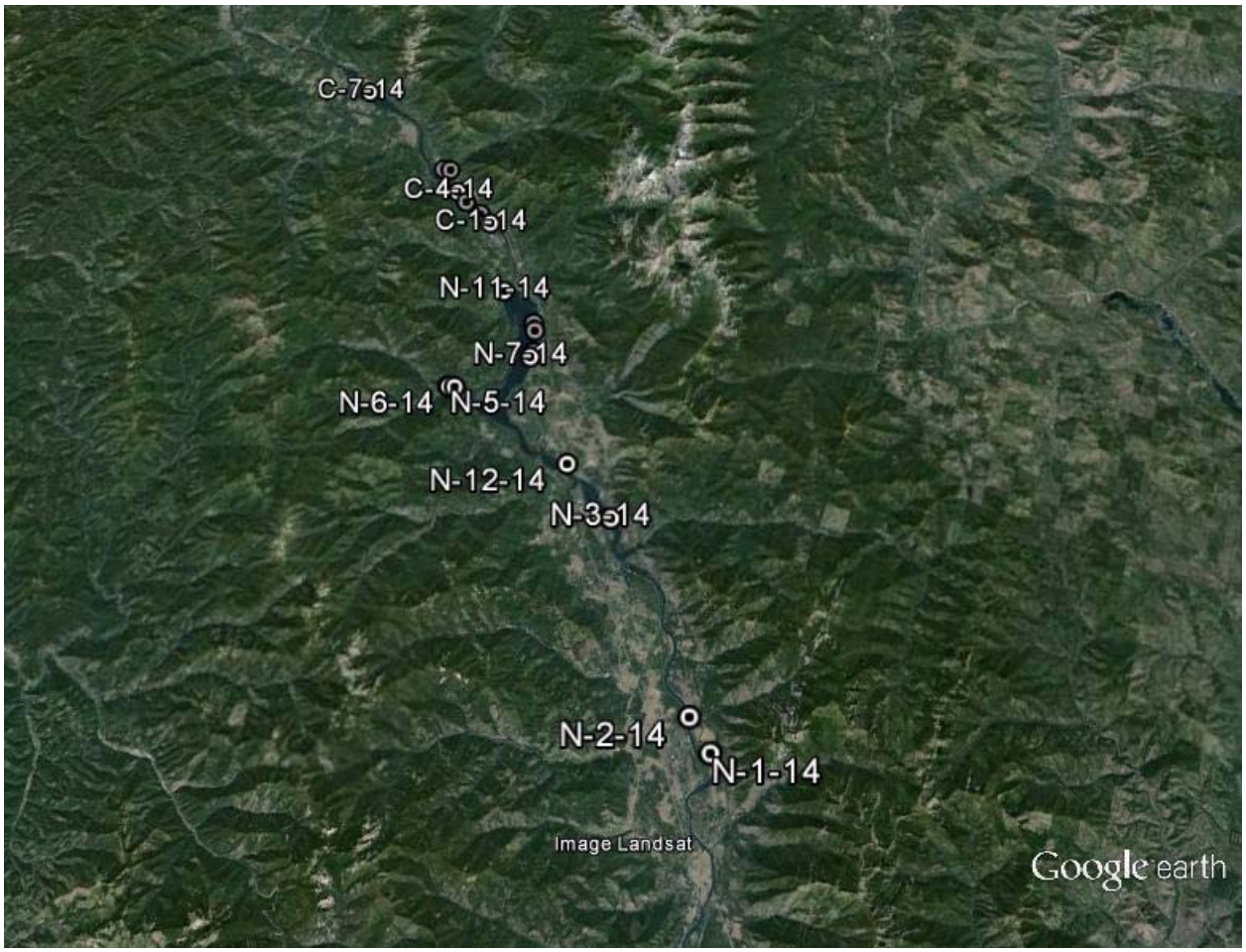
CLEAN LAKES INC.

NOXON RAPIDS & CABINET GORGE RESERVOIRS
SANDERS COUNTY, MONTANA
2014 AIS Aquatic Pesticide Application Plan (APAP)



Prepared By:

CLEAN LAKES INC.

www.cleanlake.com

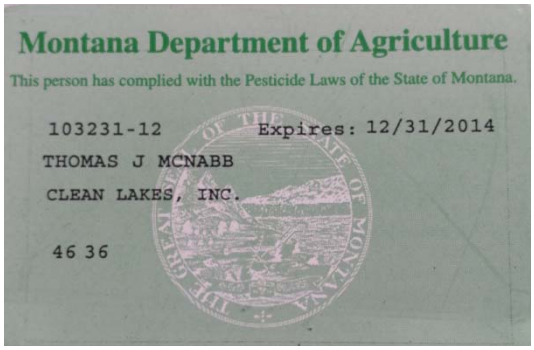
Prepared For:
Sanders County
1111 Main Street
Thompson Falls, MT 59873

August 2014

Contents

1: LIST OF PROJECT PERSONNEL

PROJECT DIRECTOR:



Thomas J. McNabb
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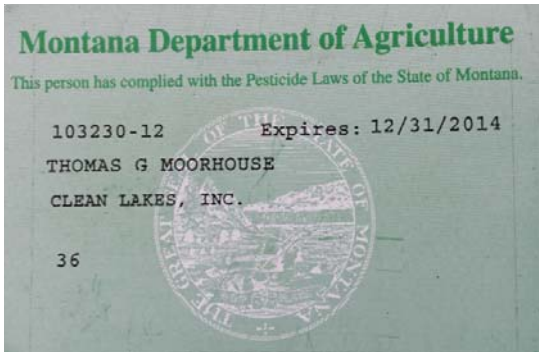
PROJECT MANAGER



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TASK FORCE CONTACT Kim Bergstrom
Pinnacle Research
pinnacle@blackfoot.net
406.546.2447

2: WORK TO BE PERFORMED

AQUATIC PESTICIDE APPLICATIONS: Clean Lakes, Inc. (CLI) has been contracted by Sanders County Montana to provide for the application of aquatic herbicides for the control of Aquatic Invasive Species (AIS) within Noxon Rapids and Cabinet Gorge Reservoirs in the project areas outlined below. Applications will be in compliance with the Montana Department of Environmental Quality National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Pesticide Application (See attached NOI Permit # MTG870000), as well as the attached Pesticide Discharge Management Plan (PDMP) developed as part of the PGP, that is also included as part of this Aquatic Pesticide Application Plan (APAP).

CLI will keep appropriate logs of the work performed and map the locations of AIS colonies treated.

AQUATIC HERBICIDES TO BE USED: The aquatic herbicides Aquathol K® (liquid endothall) and Renovate 3® (liquid triclopyr) will be applied to areas of Noxon Rapids Reservoir for the control of Eurasian watermilfoil and Curlyleaf pondweed (Label's and MSDS's included as part of this APAP).

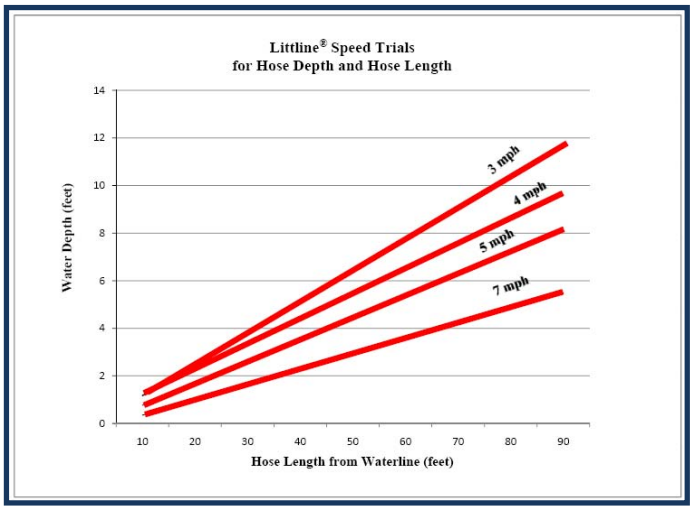
TREATMENT SCHEDULE: The aquatic herbicide treatments are planned between August 4th and August 22nd, 2014. Work shall not be performed during unsafe weather conditions.

TRANSMITTAL OF SPATIAL DATA: Sanders County hired a third party consultant to perform the 2014 pre-treatment surveys of Noxon Rapids and Cabinet Gorge Reservoirs and provided CLI with the "2014 Noxon Reservoir Herbicide Guidance Suggestions". The treatment area shapefiles will be loaded into the CLI's application vessel's computer guidance system to guide the herbicide applications. The application vessel will track and record the treatment tracks within the treatment areas, which will then be downloaded into ArcMap for the generation of Post Treatment data files.

EQUIPMENT TO BE USED: CLI's state-of-the-art LittLine vessel's (Littoral Zone Treatment vessels) will be used to perform the aquatic herbicide application. The herbicide

applications will be made to the lower portion of the water column, to increase herbicide concentration and exposure time (CET) relationships for the control of AIS.

The AIS treatment area shapefiles will be loaded into the LittLine® computer system for vessel guidance and herbicide application data recording. The treatment tracks are automatically recorded via the LittLine vessel's GPS guidance system supported by ArcView 10.0 GIS software for the production of the final treatment area maps to document the treatment areas. Treatment area maps as well as the digital data files will be provided to Sanders County within 30 days of project completion in digital format.



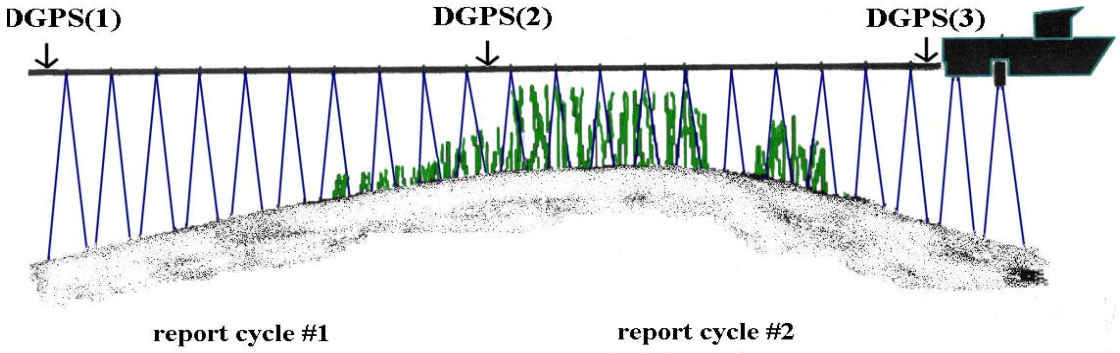
The patent pending LittLine® can place herbicides at any depth within the water column (2 - 30 feet), as well as within the bottom 2 foot of the water column. Impacts from currents, wind and wave action are reduced in deep water applications through LittLine® applications compared to conventional subsurface application systems. For instance, at boat speeds of 5 mph with 60 foot of hose extended, the herbicide application occurs at a depth of 5 foot as outlined in the LittLine® Speed Trials for Hose Depth and Hose length chart shown above (Speed Trials performed in Lake Coeur d'Alene, September 8, 2009, independent third party depth data collected by Jim Flodin, Divers West, CDA Idaho).

The LittLine® hoses are electronically reeled in or reeled out based on the varying depths of the treatment locations. Deeper depths can be achieved as required.

The LittLine system's computerized rate controllers regulate the aquatic herbicide applications through preset treatment rates. When the vessel speeds up and or slows down, the rate controllers adjust the herbicide application rate to match the preset rate in gallons of product per acre.

CLI will provide the required support equipment for material handling (unloading trucks, loading boats) as well as support trucks for the vessels assigned to the project. The aquatic herbicides will be delivered by IEDS of Spokane, WA in recyclable tote containers, 30 gallon drums and/or 2.5 gallons containers. The aquatic herbicide containers will remain on the IEDS services truck and will be transferred via a closed system to CLI's application vessel.

Submerged Aquatic Vegetation (SAV) Mapping: A Lowrance HDS Digital Echosounder System with a Structure Scan Module will be used to record data of the submerged aquatic vegetation (SAV) profile in the control plots during treatment. Data will be collected in both the .SLG (traditional sonar on HDS line) and the .SL2 (multi-channel structure scan) formats.



The data collected will be processed for at time of treatment SAV data in the treatment plots. Data will be collected to evaluate at time of treatment SAV coverage, height in the water column, and bio-volume to support post-treatment efficacy evaluations.

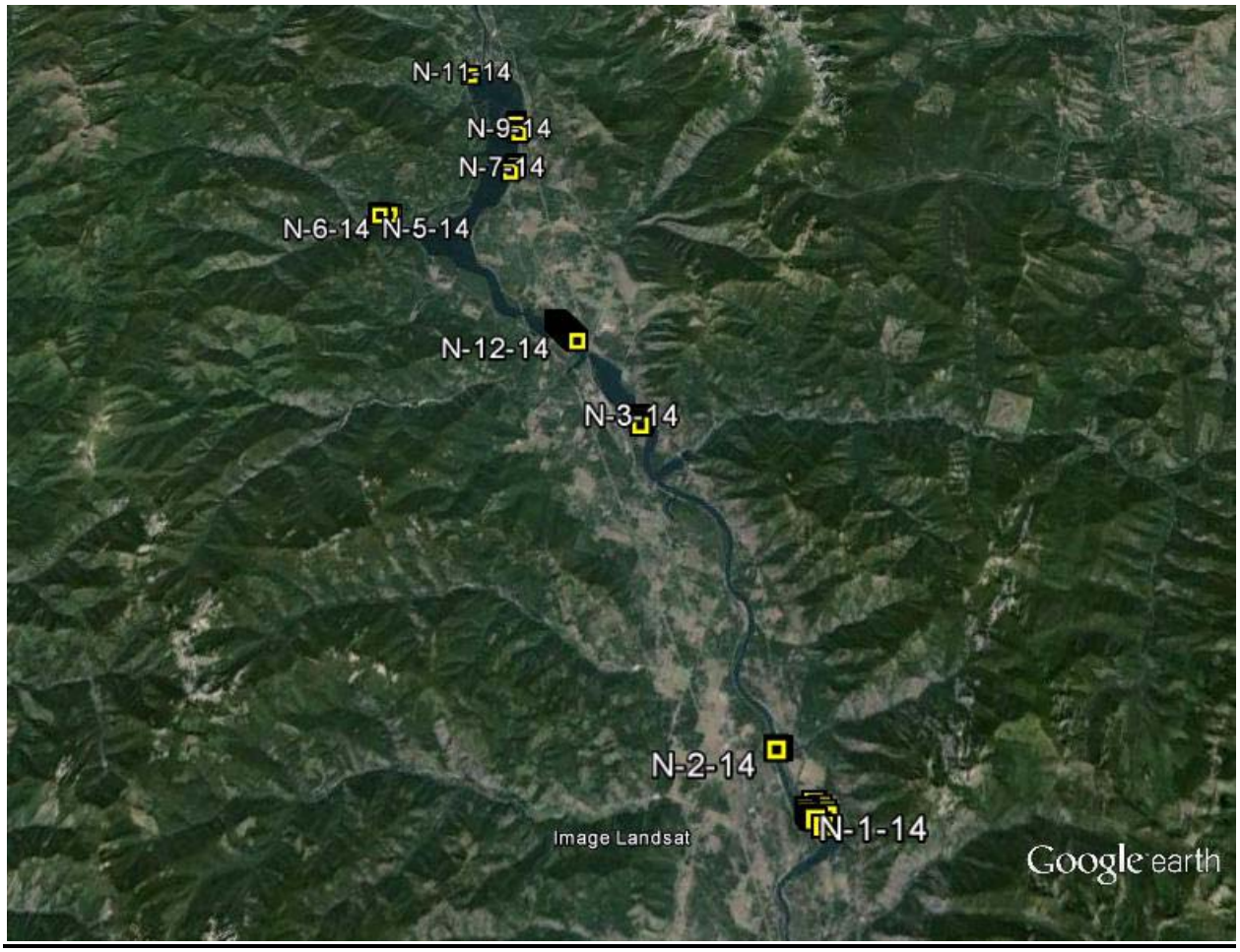
PERMIT COMPLIANCE: Sanders County provided the required permits and approvals for the herbicide treatments from the Montana Department of Environmental Quality.

SERVICES PROVIDED BY CLI: All manpower, materials, insurance, equipment and technical advice required to perform aquatic herbicide applications in the project areas identified for control as outlined in this APAP. In addition, CLI hosts a webpage at http://cleanlake.com/2014noxonrapidsais/2014treatmentareamap.html to provide project related information to the public.

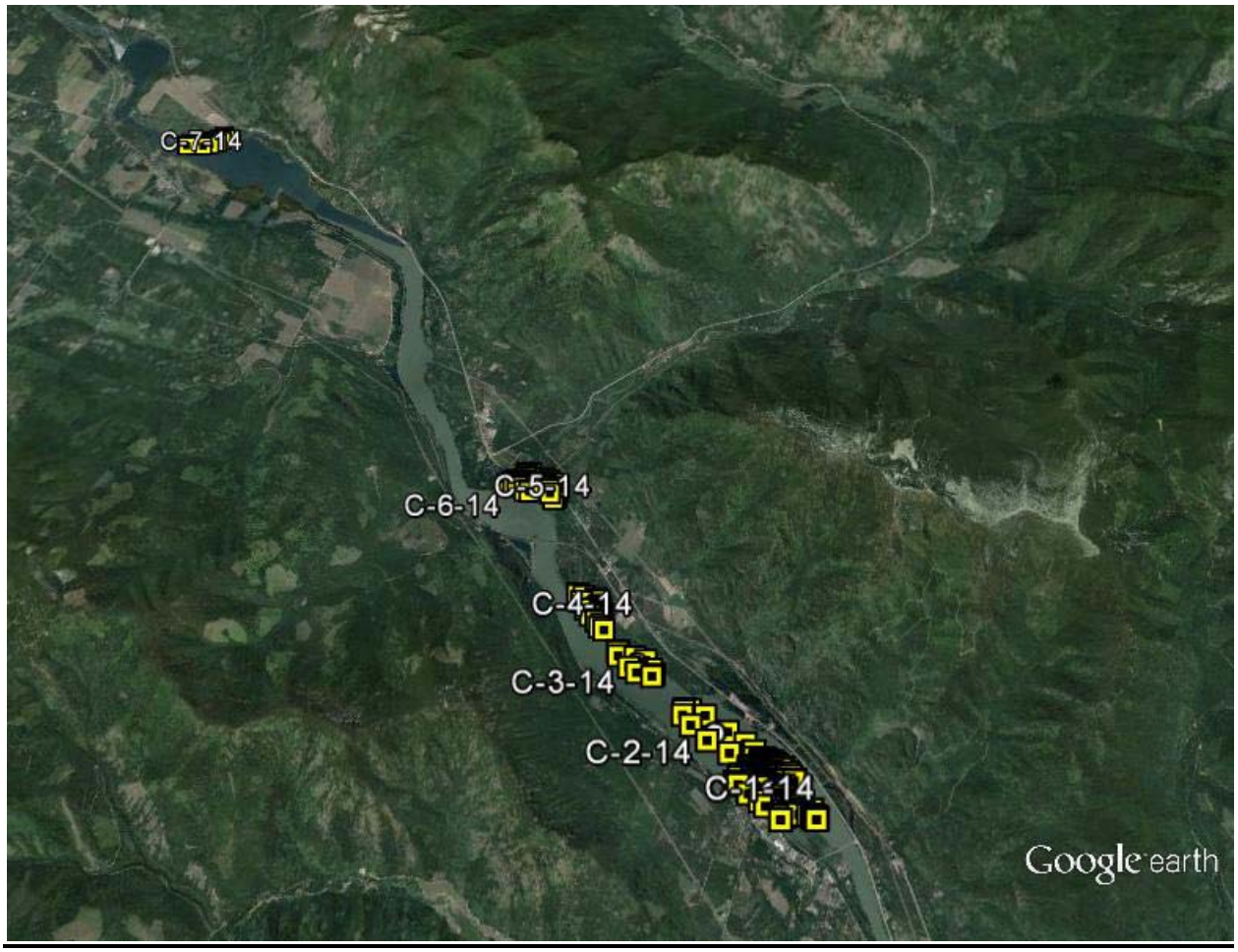
SERVICES PROVIDED BY THE SANDERS COUNTY: Sanders County provided the required permits, published legal notices in newspapers, provided notification to property owners, posting at public boat launch facilities, and provided the project area GPS shapefiles that were used to generate the final 2014 Treatment Area Maps.

3: TREATMENT SITE LAYOUT

NOXON RAPIDS RESERVOIR



CABINET GORGE RESERVOIR



4: TREATMENT SITE DATA & HERBICIDE APPLICATION RATE SCHEDULE

Table 1: Priority list for herbicide applications on Noxon Rapids Reservoir, Treatment Site Data and Aquatic Herbicide Requirements:

2014 Noxon Rapids Reservoir Proposed Treatment Plots						Triclopyr			Endothall		
Plot Number	Alternate Plot Name	Acreage	Mean Depth Full Pool	Volume	Product	Rate ppm	Qty/aft	Qty Total Site	Rate ppm	Qty/aft	Qty Total Site
Bed 4	N-4-14	2.0	5.50	11.0	End/Tri	1.00	0.905	10	2.0	1.28	14
Bed 6	N-6-14	2.3	7.60	17.5	End/Tri	1.00	0.905	16	2.0	1.28	22
Large Plots Total		4.3		28.5				26			36
Bed 5	N-5-14	0.16	3.00	0.5	Endothall	0.00	0.000	0	3.0	1.92	1
Bed 7	N-7-14	1.1	6.00	6.6	Endothall	0.00	0.000	0	3.0	1.92	13
Bed 8	N-8-14	0.5	8.30	4.2	Endothall	0.00	0.000	0	3.0	1.92	8
Bed 9	N-9-14	2.5	9.00	22.5	Endothall	0.00	0.000	0	3.0	1.92	43
Bed 10	N-10-14	0.6	9.00	5.4	Endothall	0.00	0.000	0	3.0	1.92	10
Bed 12	N-12-14	10.4	8.00	83.2	End/Tri	1.00	0.905	75	2.0	1.28	106
Strip Plots Total		15.3		39.1				75.3			181.6
Total*		19.6		67.6				101			218

Table 2: Priority list for herbicide applications on Cabinet Gorge Reservoir, Treatment Site Data and Aquatic Herbicide Requirements:

2014 Cabinet Gorge Reservoir Proposed Treatment Plots						Triclopyr			Endothall		
Plot Number	Alternate Plot Name	Acreage	BioBase Average	Volume	Product	Rate ppm	Qty/aft	Qty Total Site	Rate ppm	Qty/aft	Qty Total Site
Bed 1	C-1-14	72.5	6.30	457	End/Tri	1.00	0.905	413	2.0	1.28	585
Bed 2	C-2-14	60.6	5.00	303	End/Tri	1.00	0.905	274	2.0	1.28	388
Bed 3	C-3-14	21.7	6.50	141	End/Tri	1.00	0.905	128	2.0	1.28	181
Bed 4	C-4-14	19.5	6.80	133	End/Tri	1.00	0.905	120	2.0	1.28	170
Bed 5	C-5-14	9.0	5.70	51	End/Tri	1.00	0.905	46	2.0	1.28	66
Total*		183.4		1085.2				981.7			1388.4

*Note: The total treatment area will not exceed 200 acres.

5: MONTANA PESTICIDE GENERAL PERMIT (PGP) APPLICATOR REQUIREMENTS (extracted from the PGP)

2.1 Applicators' Responsibilities – To meet the effluent limitations of this permit, all Applicators must implement Part 2.1 to minimize the discharge of pesticides to Waters of the United States from the application of pesticides, through the use of Pest Management Measures, as defined in Appendix A.

2.1.1 To the extent not determined by the Decision-maker, use only the amount of pesticide and frequency of pesticide application necessary to control the target pest, using equipment and application procedures appropriate for this task.

2.1.2 Maintain pesticide application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges.

2.1.3 Assess weather conditions (e.g. temperature, precipitation and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.

4.0 Monitoring

4.1 Visual Monitoring Requirements for Pesticide Applicators
During any pesticide application with discharges authorized under this permit, all Applicators must, when considerations for safety and feasibility allow, visually assess the area to and around where pesticides are applied for possible and observable adverse incidents, as defined in Appendix A, caused by application of pesticides, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

Appendix A

Adverse Incident – means an unusual or unexpected incident that an Operator has observed upon inspection or of which the Operator otherwise become aware, in which**:**

(1) There is evidence that a person or non-target organism has likely been exposed to a pesticide residue, and
(2) The person or non-target organism suffered a toxic or adverse effect.

The phrase toxic or adverse effects includes effects that occur within Waters of the United States on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- Distressed or dead juvenile and small fishes
- Washed up or floating fish

- Fish swimming abnormally or erratically
- Fish lying lethargically at water surface or in shallow water
- Fish that are listless or nonresponsive to disturbance
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase, toxic or adverse effects, also includes any adverse effects to humans (e.g., skin rashes) or domesticated animals that occur either from direct contact with or as a secondary effect from a discharge (e.g., sickness from consumption of plants or animals containing pesticides) to Waters of the United States that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy).

Visual Monitoring Notes:

6: PESTICIDE DISCHARGE MANAGEMENT PLAN (PDMP)

Pesticide Discharge Management Plan

for:

Sanders County Aquatic Plant Management Project
2504 Tradewinds Way, Suite 1 B, Thompson Falls, MT 59873

Decision-maker(s):

Aquatic Invasive Plant Task Force/c/ Sanders County
John Halpop
Montana State University Extension/Sanders County
2504 Tradewinds Way, Suite 1 B,
Thompson Falls, MT 59873
(406) 827-6934 (office)
(406) 544-7527 (cell)

PDMP Contact(s):

Clean Lakes, Inc.
Thomas Moorhouse
PO Box 3548
208-929-2757
tmoorhouse@cleanlake.com

PDMP Preparation Date:

08/1/ 2012

Contents

SECTION 1: Operator Information

1. A brief description of the Pest Management Area(s) are outlined below:

The pest management area consists of those areas infested with invasive aquatic plant populations (specifically Eurasian watermilfoil and curly-leaf pondweed) in Noxon rapids Reservoir, MT.

2. Identify the Pesticide Use Patterns for this Pest Management Area that triggers the requirement to develop a Pesticide Discharge Management Plan. (check all that apply). Note: Decision-makers, that are a large entity, are required to develop a PDMP if they are required to submit an NOI. See Part 5.0 of the PGP for exceptions.
   a. ☐ Mosquitoes and Other Flying Insect Pests
   b. ☒ Weeds and Algae
   c. ☐ Animal Pests
   d. ☐ Forest Canopy Pests

3. Operator Type (check one):
   a. ☐ Federal Government
   b. ☐ State Government
   c. ☒ Local Government
   d. ☐ Mosquito control district (or similar)
   e. ☐ Irrigation control district (or similar)
   f. ☐ Weed control district (or similar)
   g. ☐ Other: If other, provide brief description of type of Operator:

SECTION 2: PDMP Team

1. Decision-maker: *Any entity with control over the decision to perform pesticide applications including the ability to modify those decisions.*

   Company or Organization Name: Aquatic Invasive Plant Task Force
   Name: John Halpop
   Address: 2504 Tradewinds Way, Suite 1 B
   City, State, Zip Code: Thompson Falls, MT 59873
   Telephone Number: 406-827-6934
   Email address: john.halpop@montana.edu
   Fax number: 208-334-2283
   Area of Control (if more than one Operator at site): Noxon Rapids and Cabinet Gorge Reservoirs

2. PDMP Contact: *Person(s) who should be contacted regarding PDMP questions.*

   Company or Organization Name: Clean Lakes, Inc.
   Name: Thomas Moorhouse
   Address: PO Box 3548
   City, State, Zip Code: Coeur d'Alene, ID 83816
   Telephone Number: 208-929-2757
   Email address: tmoorhouse@cleanlake.com
   Fax number: 208-665-1479
   Area of Control (if more than one Operator at site): Noxon Rapids and Cabinet Gorge Reservoirs

   Company or Organization Name: Clean lakes, Inc.
   Name: Thomas McNabb
   Address: PO Box 3548
   City, State, Zip Code: Coeur d'Alene, ID 83816
   Telephone Number: 208-929-2748
   Email address: tmcnabb@cleanlake.com
   Fax number: 208-665-1479
   Area of Control: Noxon Rapids and Cabinet Gorge Reservoirs

3. **This PDMP was Prepared by: *Person(s) responsible for developing and revising the PDMP.***

   Company or Organization Name: Clean Lakes, Inc.
   Name: Thomas Moorhouse
   Address: PO Box 3548

City, State, Zip Code: Coeur d'Alene, ID 83816
Telephone Number: 208-929-2757
Email address: tmoorhouse@cleanlake.com
Fax number: 208-665-1479
Area of Control (if more than one Operator at site): Noxon Rapids and Cabinet Gorge Reservoirs

4. Additional team members and their responsibilities.

Team Member Name(s)	Individual Responsibilities
N/A	

SECTION 3: Problem Identification

3.1 Pest Problem Description

1. A brief summary of the pest problem is outlined in the table below.

Summary of Pest Problem

Target Pest(s) *Note: Use common name*	**Source of the pest problem**	**Data Source (e.g. survey conducted in 2010)**
Eurasian watermilfoil	Existing infestation	Surveys from 2008 to 2012
Curly-leaf pondweed	Existing infestation	Surveys from 2008 to 2012

2. A brief description of the pest problem is outlined below:

Eurasian watermilfoil and Curly-leaf pondweeed out-compete native plant species, cause degradation of the aquatic habitat and interfere with navigation and recreation. Treatment is necessary to ensure that native species and aquatic habitat can be maintained and/or improved, and to ensure that activities such as recreation and navigation can continue.

3.2 Action Threshold(s)

1. A brief summary of the action threshold(s) is outlined in the table below:

Summary of Action Threshold(s)

Target Pests	**Action Thresholds**
Eurasian Watermilfoil Noxon Rapids and Cabinet Gorge Reservoirs	EWM reaches a density that interferes with recreation or navigation, or degrades aquatic habitat and habitat diversity
Curlyleaf pondweed Noxon Rapids and Cabinet Gorge Reservoirs	CLP reaches a density that interferes with recreation or navigation, or degrades aquatic habitat and habitat diversity

2. A brief description of the action threshold(s) is outlined below:

   Pest Management Objective: The Pest Management Objective for Noxon Rapids and Cabinet Gorge Reservoirs is to protect and improve native species aquatic habitat diversity and preserve recreation, navigation and boater access through the control of Eurasian watermilfoil primarily and Curlyleaf pondweed where the two are found together.

   Target Pest: Eurasian watermilfoil

   Action Threshold: Dense Eurasian watermilfoil that interferes with navigation, recreation or degrades habitat and diversity.

   Basis for the action threshold: Historic growth of Eurasian watermilfoil in these reservoirs has caused dense monocultures of plants that interferes with boating and recreation. Treatments will be targeted to help maintain the recreational value and aquatic diversity in infested areas. Aquatic plant surveys have been conducted since 2008. Those surveys have identified Eurasian watermilfoil distribution and density and demonstrated treatment efficacy (through demonstration trials), native vegetation treatment impacts and Eurasian watermilfoil spread. Treatments in these waterbodies will be focused on high density Eurasian watermilfoil areas.

   Method to determine when the action threshold has been met: Aquatic plant surveys are conducted to determine when the threshold has been met. The action threshold has been met when, through visual inspection or point intercept surveys, Eurasian watermilfoil is observed to be the dominant aquatic plant in a proposed treatment area. A point intercept survey in 2008, 2009, 2010 and 2012 identified several dense areas in Noxon Reservoir. Pre treatment visual and point intercept surveys will be conducted in these areas prior to treatment to verify that the action threshold has been met.

A brief description of the action threshold(s) is outlined below:

Pest Management Objective: Noxon Rapids Reservoir: Eurasian watermilfoil eradication

Target Pest: Eurasian watermilfoil

Action Threshold: Presence of Eurasian watermilfoil

Basis for the action threshold: The relatively small population of Eurasian watermilfoil identified in Noxon rapids Reservoir allows for the treatment much of the identified acres. Due to the relatively small size and distribution of Eurasian watermilfoil in this lake, eradication is the project goal.

Method to determine when the action threshold has been met: Aquatic plant survey(s) will be conducted to verify that Eurasian watermilfoil is still present in areas that were identified previously. Visual and point intercept surveys will be conducted to confirm the presence of Eurasian watermilfoil prior to treatment.

3.3 General Location Map

A copy of the general location map for this facility is in Attachment A.

3.4 Water Quality Standards

A brief summary of Tier 3 waters and waters impaired for pesticides.

Not Applicable

SECTION 4: Pest Management Options Evaluation

1. A brief description of the pest management options (include impact to water quality, impact to non-target organisms, feasibility, cost effectiveness and any relevant previous Pest Management Measures) is outlined below.

- Target Pest: Eurasian watermilfoil
- No Action: Expansion and increased density of Eurasian watermilfoil
- Prevention: MT Department of Agriculture and MT Department of Fish, Wildlife and Parks operates watercraft inspection stations throughout the region for the purpose of preventing invasive aquatic species introduction. Although these stations help prevent the spread of aquatic invasive species, their coverage is not complete and watercraft can move from to one waterbody to another without being inspected.
- Mechanical/Physical Methods: Populations are present in densities that make mechanical / physical methods not feasible. Mechanical / physical removal methods are time intensive and more expensive than alternative methods. Diver assisted suction harvesting is the method that has historically been utilized utilized for mechanical Eurasian watermilfoil removal in neighboring states on smaller infestations. This method has demonstrated poor efficacy when utilized in large high density Eurasian watermilfoil areas.
- Cultural Methods: Montana government agencies have ongoing public education campaign with a "Inspect, Clean, and Dry" message that supports the prevention effort including billboards, brochures, and other educational materials
- Biological Control Agents: Eurasian watermilfoil has no biological control agent that has been proven in the peer reviewed scientific literature for predictable and reliable use for Eurasian watermilfoil control. In addition, some biological control stocking involves stocking live viable plant reproductive tissue. This could be a violation of Montana statute and comes with the risk of introducing other aquatic invasive species. Grass carp can be an effective biological control agent for Eurasian watermilfoil, but stocking densities in these areas would be cost prohibitive. In addition, grass carp cause ecosystem effects that would be undesirable in these water systems.
- Pesticides: Aquatic herbicides have historically been used in northern states with demonstrated efficacy. Rhodamine dye and herbicide treatment demonstration trials conducted in 2009 and 2010 demonstrated efficacy with no adverse effects to aquatic organisms have been observed. Post treatment demonstration surveys have also demonstrated an increase in native plant diversity in treated areas. Pre and post treatment point intercept surveys have demonstrated the efficacy of aquatic herbicide treatments at removing Eurasian watermilfoil from treated areas. Native aquatic plant frequency has been shown to increase following treatments. In addition, herbicide residue monitoring has been conducted in conjunction with treatments and aquatic herbicide levels historically have dropped quickly following treatment.

2. A summary of Pest Management Measures that will be or are implemented to meet the technology-based effluent limitations is outlined below:

Trailing hoses (Littoral Zone Treatment Technology, aka Littline®) will be used to deliver aquatic herbicide directly into the Eurasian watermilfoil treatment plots in the lower water column. Using this method and based on water exchange related to water flows, half of the water column can be treated, effectively reducing pesticide use and delivering herbicide directly to the target plants. Contracted herbicide applicators will be required to utilize: 1. GPS and GIS to ensure treatment is conducted within designated areas; 2. Trailing hoses that that deliver herbicide to the lake bottom; 3. Technology that targets lake bottom treatment in treatment areas with varying depth; and 4. Technology that adjusts herbicide injection rates with varying boat speed to ensure proper application rates.

Target Pest: Eurasian watermilfoil
Pest Management Measures: Clean Lakes, Inc., the contracted applicator, will use the liquid form of aquatic herbicides conatining the active ingredients endothall, diquat, and triclopyr. Targeted treatments will be conducted on priority areas as determined by the Task Force in Noxon Rapids Reservoir. The precise treatment areas will be determined in the spring following survey. Treatment will be conducted using trailing hoses that apply herbicide directly to the lower water column. By applying herbicide to the lower water column, the treatment is made directly to the plants, increasing contact time and eliminating the need to treat the entire water column where conditions allow. Herbicide treatment will be calculated at various label rates based on site conditions to ensure efficacy in treated areas.

SECTION 5: Planning

5.1. Pesticide application equipment preventative maintenance program

EQUIPMENT: Littoral Zone Equipment Technology (Littline)

Person responsible for PM on this equipment: Thomas McNabb and Thomas Moorhouse

Frequency: As needed, prior to each application day.

All components associated with pesticide application equipment will be maintained in proper working order according to manufacturer recommendations or more frequently, as needed, prior to treatments. Equipment will be monitored for performance during application to ensure components are operating as required.

Equipment will be thoroughly washed down in the treatment area upon completion of treatments, with remnant pesticide used or stored for proper disposal.

The state certified applicator is responsible for inspecting, cleaning, and repairing application equipment prior to each application. All components associated with herbicide application equipment will be maintained in proper working order according to manufacturer recommendations or more frequently, as needed, prior to treatments. Equipment will be monitored for performance during application to ensure components are operating as required. Equipment will be thoroughly washed down in the treatment area upon completion of treatments. This procedure will be reviewed and/or updated annually.

This procedure will be reviewed and/or updated annually.

5.2. Pesticide application equipment calibration

EQUIPMENT: Littoral Zone Equipment Technology (Littline)

Person responsible for Calibration: Thomas McNabb and Thomas Moorhouse

Frequency: Prior to each application project.

The state certified applicator is responsible for pesticide application equipment calibration. Calibration will be carried out through manufacturer recommendations, any appropriate methods that may be found in the Core Pesticide Manual or the Aquatic Weed Training Manual used as study guides for Initial Applicator Licensing by the Montana Department of Agriculture, and/or calibration methods that are industry practices. Records will be maintained by the state certified applicator.

Records will be maintained by Thomas McNabb and/or Thomas Moorhouse

5.3. Pesticide application rate & frequency:

Section 4.2 lists pesticides chosen for Target Pests. For each, describe the person responsible for ensuring the pesticide use is 'per the label.'

Target Pest 1: Eurasian Watermilfoil

Name of person responsible for application frequency & concentration: Thomas McNabb or Thomas Moorhouse

Pesticide concentration: Per herbicide label and site conditions. Inert dye dissipation study was used to predict contact exposure & herbicide rates needed to achieve desired results. From this data, concentration (ppm) was determined Littline® On-board computer with pre-loaded data controls exact placement depth and rate of aquatic herbicides. Flow of product varies with change in speed to maintain consistent application rate per acre-foot. Post application reporting includes: Date & Time of application, Conditions, Rate delivered at pre-set data points, total amount of product used, total amount of active ingredient applied. This was conducted by US Army Corp. of Engineers & Clean Lakes Inc**.**

Pesticide Frequency: Per label directions and plot specific.

5.4. Assessment of environmental conditions:

Person responsible for Pre-application Assessment: John Halpop in conjunction with water body owner and Clean Lakes, Inc. (Thomas McNabb and Thomas Moorhouse)

Environmental Factors: The state certified applicator, in conjunction with the waterbody Owner/Operator and any collaborators, is responsible for assessment of environmental conditions prior to and during an application event. Factors to be used include any environmental factors outlined on the herbicide label, existing or projected water flow and depth, weather forecasts, wind speed and any other site specific environmental factors that may exist

Factors to be used include any environmental factors outlined on the herbicide label, existing or projected water flow and depth, weather forecasts, wind speed and any other site specific environmental factors that may exist.

Assessment records will be maintained by Thomas McNabb and Thomas Moorhouse

5.5. Pre-application pest monitoring *(if necessary)*:

Name of person responsible: Task Force Contractor

Assessment method: Whole reservoir point-sampling, by GPS has been completed to map location and density of Eurasian watermilfoil. Plant community assessments are critical to making post treatment statements regarding efficacy. Pre-and post plant data are available for 2009 and 2010 data collection and will serve as a baseline for treatments proposed in 2012. Pre-treatment assessments will be made in 2012.

5.6. Post-application monitoring *(if necessary)***:**

The goal of this task is to quantitatively assess effectiveness of pesticide applications for control of Target Pest 1.

Name of person responsible: Task Force Contractor

Assessment method: The goal of this task is to quantitatively assess effectiveness of herbicide applications for control of Eurasian watermilfoil. Research phase aquatic vegetation surveys were conducted pre-treatment, 5 and 52 weeks after treatment in 2009 and 2010. This data will serve as baseline information for 2012 applications. In addition to pretreatment dye studies used to predict herbicide rate, post treatment water sampling was done to verify, or document herbicide residual(s) in 2009 and 2010. Post-treatment plant community evaluations will be conducted at a minimum 52 weeks after treatment.

Post-treatment plant community evaluations will be conducted at a minimum __6_ weeks after treatment.

SECTION 6: Response Procedures

6.1 Spill Response Procedures

6.1.1 Spill Containment

The pesticide applicator will provide and be responsible for spill response procedures. The applicator will be responsible for enacting the immediate spill response.
In the event of a spill, the response will proceed as follows:

1. All pumps will be turned off.
2. All valves will be closed.
3. Spill will be quickly surrounded by a spill containment dike. Spill kits will be readily available at all times.
4. Absorbent mats will be used to clean up the spill.
5. All clean up materials will be placed in plastic containment bags and disposed of properly.

6.1.2 Spill Notification

The pesticide applicator will provide and be responsible for spill response procedures. The applicator will be responsible for enacting the immediate spill notification.

1. The pesticide applicator will call 911 to notify all relevant emergency response agencies of the spill and any contact numbers provided on the product's Material Data Safety Sheet. Information such as type of herbicide, amount spilled, location of the spill, injuries incurred, and response procedures initiated must be provided.
2. The applicator then must notify Montana Department of Agriculture immediately upon the discovery of a spill at (406) 444-5400.
3. Details regarding the spill will be documented in writing within thirty (30) days of the applicator becoming aware of the spill.

6.2 Adverse Incident Response Procedures

6.2.1 Responding to an Adverse Incident

The pesticide applicator will provide and be responsible for spill response procedures. The applicator will be responsible for immediate adverse incident response.

In the event of an adverse incident, the response will proceed in the following manner:

1. Stop all herbicide application activities and secure equipment to prevent spills or leaks.
2. If a person is exhibiting adverse effects as a result of herbicide application, call 911.
3. The applicator then must notify Montana Department of Agriculture immediately upon the discovery of a spill at (406) 444-5400.
4. If adverse effects are observed with fish or wildlife contact the MT Department of Fish, Wildlife and Parks office at (406) 444-2452

EMERGENCY RESPONSE PLAN

(In compliance with 29 CFR 1910.120(b)(4)(ii)(H) and 29 CFR 1910.120(l)

SEE SITE SPECIFIC SAFETY PLAN INCLUDED IN THE AQUATIC PESTICIDE APPLICATION PLAN.

A written report describing the an incident will be submitted to he Montana Department of Enviromental Quality within thirty (30) days of the incident's occurrence. This report must include the following:

• Date and time you contacted EPA notifying the Agency of the adverse incident;
• Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.);
• A description of the circumstances of the incident including species affected, number of individual and approximate size of dead or distressed organisms;
• Magnitude of the effect (e.g., aquatic square area or total stream distance affected);
• Quantity of pesticide applied and EPA registration number of pesticide product, intended use site (e.g., banks, above, or direct to water), and method of application
• Information on any laboratory tests performed and test results; and
• Actions to be taken to prevent recurrence of the incident.

SECTION 7: Documentation to Support Eligibility Considerations under Other Federal Laws

A copy of the documentation is in Attachment C.

SECTION 8: Signature Requirements

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the application of pesticides, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

Repeat as needed for multiple Decision-makers at the site.

SECTION 9: PDMP Plan Modifications

- ISDA will modify the PDMP whenever necessary to address any of the triggering conditions for corrective action in Part 6.1 or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to your PDMP will be made before the next pesticide application that results in a discharge, if practicable, or if not, no later than 90 days after any change in pesticide application activities. The revised PDMP will be signed and dated in accordance with the PGP, Appendix B, Subsection B.11.
- ISDA will include significant changes in the activities or their timing on the project, changes in personnel, updates to site maps, and so on.

SECTION 10: PDMP Availability

- A copy of the current PDMP will be retained, along with all supporting maps and documents, at the address provided in Section III.3 of the NOI. The PDMP and all supporting documents will be readily available, upon request, and copies of any of these documents provided, upon request, to EPA; a State, Territorial, Tribal, or local agency governing discharges or pesticide applications within their respective jurisdictions; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). EPA may provide copies of your PDMP or other information related to this permit that is in its possession to members of the public.
- Any Confidential Business Information (CBI), as defined in 40 CFR Part 2, may be withheld from the public provided that a claim of confidentiality is properly asserted and documented in accordance with 40 CFR Part 2; however, CBI must be submitted to EPA, if requested, and may not be withheld from those staff within EPA, FWS, and NMFS cleared for CBI review.

ATTACHMENTS

Attach the following documentation to the PDMP:

Attachment A – General Location Map

Attachment B – Pesticide General Permit

Attachment C – NOI and Acknowledgement Letter from State DEQ

Attachment D – Adverse Incident Report

Attachment E – Corrective Action Log

Attachment F – PDMP Amendment Log

Attachment G – Subcontractor Certifications/Agreements

Attachment H – Delegation of Authority

Attachment I – Annual Reports and Other Record Keeping

Attachment A – General Location Map

Attachment B – Pesticide General Permit

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

GENERAL PERMIT

For

PESTICIDE APPLICATION

Permit No.: MTG870000

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA), and the federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. 1251 *et. seq.*, applicants issued an authorization letter for this Pesticide General Permit, are permitted to discharge wastewater to state waters in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

A copy of this General Permit and a written authorization letter from the Department must be available on site at all times. The General Permit is not valid without a current authorization letter from the Department.

This permit shall become effective on **November 1, 2011.**

This permit and the authorization to discharge shall expire at midnight, **October 31, 2016.**

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

Jenny Chambers, Chief
Water Quality Bureau
Permitting and Compliance Division

Issuance Date: April 9, 2011

Table of Contents

I. COVERAGE UNDER THIS GENERAL PERMIT

A. Coverage Area

The Pesticide General Permit (PGP) applies to all areas of the State of Montana, except for within the boundaries of Indian Reservations.

B. Activities Eligible for Coverage under this General Permit

As of the permit's effective date, this permit is available to any owner or operator who discharges to state surface waters through the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (collectively "pesticides") in state surface waters when the application is for one of the following pesticide use patterns provided below. The requirements of the PGP are separated into two categories:

- Tier I - Requirements for all owner/operators.
- Tier II – Additional requirements for owners/operators that apply pesticides to an area greater than the treatment area annual threshold identified below.

#	**Pesticide Use Pattern**	**Treatment Area Annual Threshold**[1,2]
1	Piscicides and Other Nuisance Animals (i.e. zebra mussels)	10 acres
2	Weeds and Algae	100 acres
3	Aerial Pest Control (i.e. Forest Canopy)	1000 acres
4.	*Mosquito and Other Flying Insect Pests*	
4a.	Larvae chemical control	100 acres
4b.	Chemical adulticide	1000 acres
4c.	Biological control	6,400 acres
5.	Research & Development	10 acres
6	Other not classified	1000 acres

1. Calculations should include the area of the applications made to: (1) state surface waters *that contain water at the time of pesticide application* and (2) conveyances with a hydrologic surface connection to state surface water *at the time of pesticide application.* For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of treatment area.
2. Any pesticide discharge into waterbodies classified A-closed has a threshold of > 0 acres and is therefore subject to Tier II requirements.

C. Activities Ineligible for Coverage this General Permit.

The following activities are ineligible for coverage under the PGP:

1. A discharge of pesticides covered by another MPDES permit.
2. The pesticide is not labeled for use in water by the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA).

3. The discharge or application of Endosulfan or its metabolites in Hauser Lake, because the lake is listed as impaired for Endosulfan on Montana's list of impaired water bodies.

D. Sources seeking coverage under the PGP.

As of the effective date of this permit, an owner or operator seeking to obtain coverage under the PGP must submit a complete Notice of Intent (NOI) package, including a signed NOI Form (Appendix A) and the fee (includes both permit application fee and annual fee for first year as required under ARM 17.30.201) prior to discharging.

An owner/operator may chose to obtain coverage anywhere within the boundaries of one county ("single-county"), or within the boundaries of up to twenty contiguous counties ("multi-county"). The NOI package should request coverage for any pesticide use patterns that are the responsibility of the owner/operator in the covered area unless authorization will be obtained under a separate NOI.

An owner/operator must determine whether they annually apply pesticides to "under the threshold (Tier I)" or "over the threshold (Tier II)" acres of water area. As part of the NOI submittal, the owner/operator must indicate which of the following permit types they are requesting:

(A) Tier I - Under annual threshold:

(1) Single-county

(2) Multi-county

(B) Tier II - Over annual threshold

(1) Single county

(2) Multi-county

Completion of the NOI acknowledges compliance with the relevant parts of the PGP. For instance, for owner/operators over the annual threshold, this includes the requirement to develop and maintain a pesticide management plan as detailed in Part II.B.1. Submittal of the plan to the Department is not required. However, the plan must be completed and up-to-date, and must be available upon Department request.

The Department will issue a letter of acknowledgement to the owner/operator after receiving a complete NOI package submittal. Coverage under the PGP is renewable on a five-year basis. The owner/operator is required to pay the annual fee and comply with all relevant requirements contained in the PGP until they are required to renew or they request to terminate the permit.

Any pesticide application that has historically been authorized under the 308 program shall continue to be authorized under the 308 program until the PGP is effective. As long as the PGP is effective, the 308 Authorization permit shall no longer be an active program as stated by 75-5-308(3), MCA "The department may not authorize an exemption from water quality standards for an activity that requires a discharge permit under rules adopted by the board pursuant to 75-5-401."

E. Termination of Permit Coverage

Permit coverage remains in effect until the General Permit is renewed or the Department receives a complete Notice of Termination (NOT) form from the permittee that the point source discharge has been eliminated. The NOT must be signed and certified in accordance with the signatory requirements in Part V.G of this General Permit and all applicable fees must be paid. Failure to submit a NOT shall result in accrual of annual fees until this notice is received by the Department.

In addition to the ability to request a termination, the owner or operator of a facility covered under this General Permit may request to be excluded from coverage under this General Permit by applying for and obtaining an individual MPDES permit pursuant to Title 17, Chapter 30, Subchapter 13. If an individual MPDES permit is issued to the owner or operator of the facility, coverage under this General Permit is terminated on the effective date of the final MPDES permit.

F. Transfer of Coverage

The Department may transfer a pesticide authorization to a new owner or operator in accordance with Part V.M. of this General Permit.

II. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. Effluent Limitations

1. Tier I: All Owner/Operators:

Effective immediately and lasting for the duration of the permit, all owners/operators of pesticide applications that discharge into state surface water and who are subject to this General Permit must:

a. Control the discharge as necessary to meet applicable numeric and narrative water quality standards by complying with this permit; and

b. Apply pesticides within labeled rates and/or in accordance with pesticide use directions under FIFRA and other state pesticide requirements.

2. Tier II: Greater than Threshold Owner/Operators

Every owner/operator who is above an annual treatment area threshold shall comply with the above Tier I effluent limits for "all owner/operators" as well as the following additional Tier II requirements:

a. Ensure pesticide application equipment is maintained in proper operating condition by inspecting, cleaning and repairing such equipment on a regular basis.

b. Ensure pesticide application equipment is calibrated in order to have effective pesticide application and pest control by adhering to any manufacturer's conditions and industry practices.

B. Tier II Special Condition – Pesticide Management Plan

The Department has determined that the requirement to maintain a pesticide management plan is an appropriate treatment method for pesticide application discharges by Tier II "Greater than Threshold" Owner/Operators:

Tier II owners/operators must develop and maintain a written pesticide management plan. To the extent that an owner/operator follows an existing plan [i.e., weed control plan, mosquito control plan, or Integrated Pest Management Plan (IPM)] which already contains the following information, the owner/operator need only reference the existing plan. However, at a minimum, prior to the first pesticide application covered under the PGP and at least once per calendar year thereafter, each Tier II owner/operator must evaluate and update their plan(s) to include the following:

a. Pesticide management team. The owner/operator must identify an individual or group of individuals (names or titles) that are a pest management "team" and clarify specific responsibilities. It must identify who is/are the decision-makers by organization name as well as either name or title of individuals. In addition, the team must identify whether an in-house or for-hire applicator will be the pesticide applicator, and clarify the recordkeeping and reporting responsibilities that will be required for such applicator. Individuals must be identified for developing and

revising the plan, reviewing and implementing control measures, and taking corrective action.

b. Description of the pest problem.

- *pest identification*– identification of each target pest(s) that are in or over state surface water;
- *general location map* – the map must identify the geographic boundaries of the entire area to which the plan applies, the approximate areas for the upcoming years' pest management area for each target pest, and the location of the state surface water(s) that will be impacted. Additionally, the map (or a separate description) should include any sensitive resources in the area. The map should be reviewed annually and updated if there are any changes; and
- *action thresholds* –the plan must include the level of pest prevalence (pest densities) or other trigger that will cause the owner/operator to initiate action to reduce the pest problem (see "action threshold" definition in Part VI). Include a description of how the action threshold was established, such as a reference to literature or policy. The action level might not always be a number; for instance, the pest may be an identified noxious weed and any incidence (>0) would trigger the action level, or the action threshold may currently be dictated by other factors.

c. Description of control measures.

The plan must include documentation on the evaluation and implementation of any pest management tools (no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides) that could feasibly be taken to minimize pesticide discharge into state surface waters for the pesticide projects authorized by the NOI. The owner/operator should use best professional judgment as well as experience with any of the control measures previously used at the site(s) to reduce pesticide discharge to base their evaluation. The plan should consider impact to non-target organisms and cost effectiveness when evaluating and selecting the most efficient and effective means of pest management to minimize pesticide discharge to state surface waters.

d. Planning.

Every Tier II owner/operator is required to include responsibilities, planning and program information in their pesticide management plan. Various agreements for some or all of the following requirements may be needed between responsible parties (such as decision-makers and for-hire applicators) and are the responsibility of the owner/operator:

- *Pesticide application equipment preventative maintenance program* - the plan shall include the identification of who (name or title) is responsible for inspecting, cleaning, and repairing the application equipment prior to use, as well as the frequency of such PM. Reviewing this procedure annually, and updating as necessary, is considered documentation for compliance with the effluent limitation in Part II.a.2.a.

- *Pesticide application equipment calibration* – the plan shall include the identification of who (name or title) is responsible, the methods used, and how often the equipment will be calibrated. Records of calibration will be required to be kept in conformance with Part II.D.2.
- *Assessment of environmental conditions* - description of who will assess and make the decision whether environmental conditions are satisfactory for pesticide application, and what factors will be used (wind speed, expected rain, temperature, etc.). Compliance with this requirement can be satisfied by using other existing environmental assessment forms.
- *Pesticide application rate and frequency*- who will determine, and what is, the desired pesticide concentration and number of applications necessary to control each target pest. The application rate and frequency must meet pesticide label requirements.
- *Pre-application pest monitoring* – description of how the pest treatment area will be assessed before treatment to determine when the action threshold(s) are met and in what geographical area. The plan must include who (employer and name or title) will make the determination and what basis they will use.
- *Post-application monitoring* - description of the process for post-pesticide application monitoring, if any. Includes determining the location and timing of any visual monitoring during or after the pesticide application, who will conduct the monitoring, and procedures for documenting any observed impacts to non-target organisms. This is not required if it is not part of expected business practice or if conditions make it infeasible or dangerous.
- *Adverse incident response procedures*. The Tier II owner/operator must identify and document the course of action or response to any potential adverse incident that might be attributed to their pesticide application (see definition of adverse incident in Part VI.) in their plan. It must include the identification of responsibilities for complying with the notification requirements, including those in Part II.E.3. of this PGP.

  The plan must include a list of the chain of command notification both internally and externally, contact agencies and phone numbers, identification and contact information for nearest emergency medical facility and nearest hazardous chemical responder (including police and fire department).
- *Spill prevention program* – The Tier II owner/operator must identify and document the course of action or response to any spills or releases that are part of the activities covered by this PGP in their plan.

  The plan should also address any areas and activities that typically pose a high risk for spills during the preparation for and implementation of pesticide applications covered under this PGP. It should address appropriate material handling procedures, storage requirements, and containment or diversion equipment that will minimize the potential for spills, or in the event of a spill enable proper and timely response.

In addition, the plan must document procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. It must include documentation of the procedures for notification for appropriate facility personnel, emergency response agencies, and regulatory agencies. The response to any spills or leaks that occur while covered under this permit must be documented.

e. *Plan Updates* - Owners/operators must review and, as necessary, revise the plan at least once a year. In addition, the plan must be reviewed and, as necessary, revised whenever any of the following triggering conditions for corrective action occur:

- an unauthorized release or discharge;
- the permittee becomes aware, or the Department determines, that control measures are not stringent enough for the discharge to meet applicable water quality standards;
- an inspection or evaluation by a Department representative determines that modifications are necessary to meet the non-numeric effluent limits; or
- the permittee observes or is otherwise made aware (e.g., a third party notification) of an adverse incident for which symptoms are unusual or unexpected during the normal course of treatment.

The owner/operator must take follow-up actions to assess and correct problems including the above triggering conditions. They must ensure that corrective action be completed before the next pesticide application that results in a discharge, if practicable, or if not, as soon as practicable thereafter. The owner/operator must document what steps were taken to eliminate the problem.

C. Monitoring Requirements

The testing procedures set forth in Part 136, Title 40 of the Code of Federal Regulations do not apply to the following monitoring requirements.

1. *Tier I: All Owner/Operators:*

a. All owners/operators must document the rationale for determining the type and amount of pesticide to be used. This is satisfied by having the pesticide label available.

2. *Tier II: Greater than Threshold Owner/Operators*

a. All Tier II owners/operators must monitor their operation to ensure the integrity of application equipment by inspecting, cleaning, and repairing equipment on a regular basis, in accordance with their pesticide management plan.

b. All Tier II owners/operators must monitor their operation to ensure the effectiveness of application by calibrating the pesticide equipment on a regular basis, in accordance with their pesticide management plan.

c. All Tier II owners/operators must conduct appropriate visual monitoring to determine if any pesticide use practices may need to be revised, and to ensure that avoidable

adverse impacts to the environment do not occur, in accordance with their pesticide management plan.

D. Recordkeeping Requirements

All records required by this PGP must be prepared as soon as possible but no later than 14 days following completion of the associated activity. This may necessitate owners/operators that are decision-makers only make appropriate arrangements with contracted for-hire applicator(s). Copies of these documents must be available upon request, and must be maintained for a period of at least three years, or in the case of the PGP and NOI three years from the date the coverage under this permit expires or is terminated.

1. *Tier I: All Owner/Operators:*

All permittees must maintain the following records:

- A copy of the PGP (electronic access is sufficient); and
- A copy of the NOI submitted to the Department, any correspondence exchanged between you and the Department specific to coverage under this permit, and a copy of the Department acknowledgment letter assigning your permit tracking number.

2. *Tier II: Greater than Threshold Owner/Operators*

Tier II permittees must maintain the following records in addition to the Tier I records:

- A copy of your pesticide management plan, including any modifications made to the plan during the term of this permit. Other existing plans (such as IPM, Weed Control or Mosquito Control plans) can satisfy this requirement as long as all of the components for a pesticide management plan required in this PGP are met;
- Pesticide Application information. Copies of, or access to, the following required pesticide applicator records. (As some of this information may be available on another record, such as a MDA Form, it does not have to be duplicated.) The required information for any pesticide application with a discharge to surface waters includes:
    - Company name and contact information for pesticide applicator;
    - Dates of application;
    - Description of treatment area, including location (name of county - include center location of treatment area (lat/long));
    - Identification of any waters, either by name or by location, to which you discharged any pesticide(s);
    - Approximate size of treatment area (acres of water);
    - Trade name, Manufacturer, and EPA Registration Number of each pesticide product used; and

- Rate of pesticide applied (and specify if quantities are for the pesticide product as packaged or as formulated and applied).

- Copies of, or access to, equipment calibration records (required to be maintained by the entity performing the pest management activity on behalf of self or client); and
- Post-application monitoring - date(s) and time(s) of any monitoring that resulted in unusual or unexpected findings, and a description of the unusual or unexpected effects identified to non-target organisms.

E. Reporting Requirements

1. *Tier I: All Owner/Operators:*

All owner/operators are subject to the adverse incident reporting requirements in Section II.E.3.

2. *Tier II: Greater than Threshold Owner/Operators*

Tier II permittees are also required to submit annual reports that contain basic information on their pesticide discharges to state surface waters, on a form issued by the Department. The annual report is due by January 28th of each year. The annual report must include information for the previous calendar year, with the first annual report required to include activities for the portion of the calendar year after the effective date of the NOI. If the effective date of the NOI is after December 1, the owner/operator is not required to submit an annual report for that first partial year but must submit annual reports thereafter, with the first annual report submitted also including information from the first partial year.

The annual report is a summary of the pest control activities for each applicable use pattern. The annual report must contain the following information specific to each pest treatment area covered under the permit:

a. Pesticide applicator(s) information;

b. Approximate amount of each pesticide product applied to or over water for the reporting year including Manufacturer, Product Trade Name, and EPA registration number(s); and

c. Identification of any waters to which you discharged any pesticide(s) and an estimate of the total water acreage treated

When a Tier II owner/operator terminates permit coverage, they must submit an annual report for the portion of the year up through the date of the termination. The annual report is due no later than 30 days after the termination date, or January 28th of the following year, whichever is earlier.

3. *Adverse Incident Reporting.*

Owner/operators must conduct appropriate visual post-application monitoring for possible adverse incidents that were brought to their attention by any means, including internal or external notification or, for Tier II owner/operators, in accordance with their

pesticide management plan. The Department expects each owner/ operators to use their best professional judgment in determining the extent to which non-target effects appear to be abnormal or indicative of an unforeseen problem associated with an application of pesticides.

Records of all visual inspections conducted at sites where an adverse incident is suspected, even for situations that do not require reporting to the Department, must be kept on site with the permittee. Observations must be noted unless they are deemed not to be aberrant.

Owners/operators are required to provide oral notice to the Department at (406) 444-3080 within 24 hours and then follow-up with a written report within five days of becoming aware of an adverse incident at the following address:

Montana Department of Environmental Quality
Water Protection Bureau
P.O. Box 200901
Helena, Montana 59620-0901

In summary, every owner/operator is required to perform the following activities in response to any suspected adverse incident:

- Provide 24-hour notification, including the date of the finding, a general discussion of the incident and a review of the necessity to conduct corrective action.
- Document the verbal notification information, including the date, time, and person you notified and a description of any deviations from notification requirements based on nuances of the adverse incident.
- Provide a written report of the adverse incident within 5 days of discovering the adverse incident. The adverse incident report must include the following information:
  - Date, time, and person(s) (including Department(s)) to whom you orally reported the adverse incident;
  - Responsible Party information;
  - Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.);
  - Date, time, and duration of incident;
  - Pesticide involved (Trade name, manufacturer, and EPA Registration#), pesticide application rate, and method of application;
  - A description of the incident including types of plants and animals affected, and approximate quantity and size of dead or distressed organisms, as can be reasonably ascertained with a visual inspection;
  - Magnitude of the effect (e.g., estimate of the aquatic square area affected); and
  - Actions to be taken to prevent recurrence of the incident.

F. Mixing Zone

No mixing zone will be allowed because the water quality standards for pesticides apply throughout the receiving stream [ARM 17.30.507(b)].

G. Obligation to Obtain Other Permits

Authorization under the PGP does not waive obligations to obtain other permits that may be required (e.g., Department of Environmental Quality Storm Water authorization or the Montana Natural Streambed and Land Preservation Act (310) permit). In addition, authorizations do not waive the responsibility to comply with the federal Endangered Species Act.

Any pesticide applicator must ensure pesticide use is in conformance with the requirements of the Montana Pesticides Act. That act authorizes the Montana Department of Agriculture (MDA) to adopt rules incorporating regulations adopted by EPA under FIFRA, which generally prescribe methods of registration, application, and the sale or use of pesticides.

Authorization under the PGP replaces the requirement for a 308 Authorization [75-5-308, MCA].

III. STANDARD CONDITIONS

A. Reporting Requirements

All monitoring data shall be reported on the supplied annual report forms and sent to the Department (see address below), postmarked no later than the 28th day of January following the reporting year.

Montana Department of Environmental Quality
Water Protection Bureau
ICIS Coordinator
P.O. Box 200901
Helena, Montana 59620-0901
Phone: (406) 444-3080

B. Monitoring and Recording of Results

For monitoring requirements of this permit the permittee shall record visual observations as required. Monitoring must be conducted according to test procedures approved under Part 136 Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit.

C. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit the results of such monitoring shall be included in the monitoring report. Such increased frequency shall be indicated.

D. Record Retention

All records and information resulting from the monitoring activities required by this permit shall be retained for a minimum of three (3) years, or longer if requested by the Department.

E. Noncompliance Notification

If for any reason, the permittee does not comply with or will be unable to comply with any effluent limitation specified in this permit, the permittee shall notify as soon as possible by phone and provide the Department with the following information, in writing, within five (5) days of becoming aware of such condition:

1. A description of the discharge and cause of noncompliance; and
2. The period of noncompliance including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

F. Inspection and Entry

The permittee shall allow the head of the Department or the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
4. Sample, or monitor at reasonable times for the purpose of assuring permit compliance, any substances or parameters at any location.

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department advance notice of any planned changes at the permitted facility or of an activity, which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine of not more than $50,000 per day of violation, or by imprisonment for not more than 2 years, or both.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.

E. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

F. Changes in Discharge of Toxic Substances

Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

    a. One hundred micrograms per liter (100 μg/l);

    b. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-

dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or,

d. The level established by the Department in accordance with 40 CFR 122.44(f).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

a. Five hundred micrograms per liter (500 μg/l);

b. One milligram per liter (1 mg/l) for antimony:

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or,

d. The level established by the Department in accordance with 40 CFR 122.44(f).

V. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants, which are not subject to effluent limitations in the permit.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

G. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed as follows:

    a. For a corporation: by a responsible corporate officer;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Department, and,

b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under Part V.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

Permit coverage is not transferable to any person except after notice is given to the Department and a transfer fee is paid. Notice of transfer must be completed on the form provided by the Department and must be received by the Department at least 30 days prior to the anticipated date of transfer. The form must be signed by both the existing owner/operator and the new owner/operator following the signatory requirements of Part V.G of this General Permit.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for payment, the Department may:

1. Impose an additional fee assessment plus interest computed at the rate established under ARM 17.30.201, or

2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate, license or other authorization for which the fee is required. The Department may lift the suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this subsection.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.

3. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

4. Toxic Pollutants: A toxic standard or prohibition is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

VI. DEFINITIONS

1. ***"A-Closed"*** waterbodies are the 15 waterbodies identified in ARM 17.30.607, .608, and .610, with specific water quality standards under ARM 17.30.621.
2. ***"Act"*** means the Montana Water Quality Act, Title 75, Chapter 5, MCA.
3. ***"Action Threshold"*** means the point at which pest populations or environmental conditions can no longer be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects. Sighting a single pest does not always mean control is needed. Action thresholds help determine both the need for control actions and the proper timing of such actions.
4. ***"Administrator"*** means the administrator of the United States Environmental Protection Agency.
5. ***"Adverse Incident"*** means an incident that you have observed upon inspection or of which you otherwise become aware, in which:

   (1) A person or non-target organism may have been exposed to a pesticide residue, and

   (2) The person or non-target organism suffered a toxic or adverse effect.

   The phrase "toxic or adverse effects" includes effects that occur within state surface waters on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

   - Distressed or dead juvenile and small fishes
   - Washed up or floating fish
   - Fish swimming abnormally or erratically
   - Fish lying lethargically at water surface or in shallow water
   - Fish that are listless or nonresponsive to disturbance
   - Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
   - Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

   The phrase, "toxic or adverse effects," also includes any adverse effects to humans (e.g., skin rashes) or domesticated animals that occur either directly or indirectly from a discharge to state surface waters that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy).
6. ***"Best management practices (BMPs)"*** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state waters. BMP's also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage[ARM 17.30.1304(9)].
7. ***"Biological Pesticide"*** (also called biopesticides) - include microbial pesticides, biochemical pesticides including methoprene and other insect growth regulators, and plant-incorporated protectants (PIP):

- *Microbial pesticide* means a microbial agent intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or dessicant, that (1) is a eucaryotic microorganism including, but not limited to, protozoa, algae, and fungi; (2) is a procaryotic microorganism, including, but not limited to, Eubacteria and Archaebacteria; or (3) is a parasitically replicating microscopic element, including but not limited to, viruses. [40 CFR 158.2100(b)]
- *Biochemical pesticide* mean a pesticide that (1) is a naturally-occurring substance or structurally-similar and functionally identical to a naturally-occurring substance; (2) has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically-derived biochemical pesticides, is equivalent to a naturally-occurring substance that has such a history; and (3) Has a non-toxic mode of action to the target pest(s). [40 CFR 158.2000(a)(1)]
- *Plant-incorporated protectant* means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for production of such a pesticidal substance. It also includes any inert ingredient contained in the plant, or produce thereof. [40 CFR 174.3]

8. ***"Calibration of Equipment"*** means measurement of dispersal or output of application equipment and adjustment of such equipment to control the rate of dispersal, and droplet or particle size of a pesticide dispersed by equipment [ARM 4.10.1501(15)].
9. ***"Chemical Pesticides"*** means all pesticides not otherwise classified as biological pesticides.
10. ***"Control measures"*** are actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), to prevent or reduce water pollution. Use of the term control measure is intended to describe the range of pollutant reduction practices that may be employed, whether they are structural, non-structural or procedural and includes BMPs as one of the components.
11. ***"Department"*** means the Montana Department of Environmental Quality (MDEQ).
12. ***"Director"*** means the Director of the Department of Environmental Quality and/or a designee.
13. ***"Direct Chemical Pesticide Application***" means any chemical residue from the application of chemical pesticides directly to state surface waters in order to control pests. For chemical or conventional pesticides applied directly to waters, it is the pesticide residue, including excess pesticide that is present outside of the treatment area or within the treatment area once the target pests have been controlled that is considered a pollutant under this permit.
14. ***"Discharge of a pollutant"*** and "discharge of pollutants" each means any addition of any pollutant or combination of pollutants to state waters from any point source. This definition includes additions of pollutants into water of the state from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works. [ARM 17.30.1304(16)].
15. ***"Drift or Spray Drift"*** means movement of a pesticide during or immediately after application or use through air to a site other than the intended site of application or use [ARM 4.10.1501(38)].
16. ***"EPA***" means the Unites States Environmental Protection Agency.
17. ***"Federal Clean Water Act"*** means the federal legislation at 33 USC 1251, et seq.

18. ***"Integrated Pest Management (IPM)"*** – is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM uses current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment [EPA PGP]. IPM as defined in FIFRA, is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks (FIFRA, 7 U.S.C. 136r-1). IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls.

19. ***"Mixing Zone"*** is defined in 75-5-103, MCA and also means a limited area of a surface water body or a portion of an aquifer, where initial dilution of a discharge takes place and where water quality changes may occur and where certain water quality standards may be exceeded.

20. ***"Multi-county,"*** means the general permit authorizing pesticide application within the boundaries of more than one county as identified by the applicant. The application is restricted to identifying twenty (20) contiguous counties under any one multi-county permit;

21. -***"Owner/operator"*** means a person who owns, leases, operates, controls, or supervises a point source [75-5-103, MCA and ARM 17.30.1304(38)]. This could include:

- Entity with control over the financing or decision to perform pesticide applications, or
- Entity with day-to-day control (pesticide applicators).

22. ***"Pest*** " means any organism under circumstances that make it deleterious to man or the environment, if it is:

(a) Any vertebrate animal other than man;

(b) Any invertebrate animal, including but not limited to, any insect, other arthropod, nematode, or mollusk such as a slug and snail, but excluding any internal parasite of living man or other living animals;

(c) Any plant growing where not wanted, including any moss, alga, liverwort, or other plant of any higher order, and any plant part such as a root; or

(d) Any fungus, bacterium, virus, or other microorganism, except for those on or in living man or other living animals and those on or in processed food or processed animal feed, beverages, drugs (as defined in FFDCA sec. 201(g)(1)) and cosmetics (as defined in FFDCA sec. 201(i)).

23. ***"Pest Management Area"*** means the area of land, including any water, for which you are conducting pest management activities covered by this permit.

24. ***"Pesticide"*** means:

(a) a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest;

(b) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; and

(c) any nitrogen stabilizer, except that the term "pesticide" shall not include any article that is a "new animal drug" within the meaning of section 201(w) of the federal Food, Drug, and

Cosmetic Act, 21 U.S.C. 321(w), that has been determined by the United States Secretary of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201 (x) of 21 U.S.C. 321(x) bearing or containing a new animal drug. The term "pesticide" does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 321. For purposes of the preceding sentence, the term "critical device" includes any device that is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, and the term "semi-critical device" includes any device that contacts intact mucous membranes but that does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body.

The term "pesticide" applies to insecticides, herbicides, fungicides, rodenticides, and various other substances to control pests. The definition encompasses all uses of pesticides authorized under FIFRA.

Note: drugs used to control diseases of humans or animals (such as livestock or pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration (FDA). Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides.

25. ***"Point source"*** means any discernible, confined, or discrete conveyance ... from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff [75-5-103(28), MCA and ARM 17.30.1304(41)].

26. ***"Pollutant"*** means ...chemical wastes, biological materials, ... and industrial, municipal, and agricultural wastes discharged into water [ARM 17.30.1304(42)].

27. ***"Receiving stream"*** means the river, stream, or creek, which receives the wastewater discharge from the construction activity.

28. ***"Regional Administrator***" means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.

29. ***"Research and Development"*** means activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development).

30. ***"Single-county,"*** means the general permit authorizing pesticide application within the boundaries of one county.

31. ***"State waters***" means a body of water, irrigation system, or drainage system, either surface or underground [75-5-103(33), MCA]. The term does not apply to:

    (i) ponds or lagoons used solely for treating, transporting, or impounding pollutants; or

    (ii) irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters.

32. ***"Surface waters***" means any waters on the earth's surface including, but not limited to, streams, lakes, ponds, and reservoirs; and irrigation and drainage systems discharging directly into a

stream, lake, pond, reservoir, or other surface water. Waterbodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water [ARM 17.30.602(33) and 17.30.702(23)].

33. ***"TMDL"*** means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

34. ***"Treatment Area"*** means the area of any waters to which pesticides are being applied. Multiple treatment areas may be located within a single "pest management area."

    The "treatment area" includes the entire area, over water, where the pesticide application is intended to provide pesticidal benefits. In some instances, the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal should be calculated by multiplying the width of the canal by the length over which the pesticide is intended to control weeds. The treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits.

35. ***"Unavoidable Discharge of Chemical Pesticides"*** means the application of chemical pesticides to control pests that are present on or over surface water, including near such waters, where a portion of the pesticides will unavoidably be deposited into waters of the state. For any pesticide applied over water (e.g., adulticide mosquito control or aerial application of insecticides to a forest canopy where surface water may be present below the canopy), any pesticide or pesticide residue that is incidentally deposited in state surface waters is considered a pollutant since the intended purpose of the application is to target pests above the water but it was unavoidable that some of the application missed the pests and ended up in the water. However, the PGP does not include "spray drift" – the airborne movement of pesticide sprays away from the target application site into a water of the state – or application of pesticides to terrestrial agriculture crops where storm water may pick up residual. As non-point sources, spray drift and stormwater runoff are not covered by the PGP.

36. ***"Visual monitoring"*** means an examination of the area of treatment to ensure treatment was successful and to ascertain whether an adverse impact occurred.

Appendix A: Notice of Intent

Montana Department of
ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU

Agency Use
NOI No.:
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM
NOI

Notice of Intent (NOI)
Pesticide Application
MTG870000

The NOI form is to be completed by the owner or operator of pesticide activity to or over water that is eligible for coverage under the Montana Department of Environmental Quality's *Pesticide General Permit* (PGP). **Please read the attached instructions before completing this form. Also see the instructions for the thresholds for completing theNOI-Tier II Supplement**. You must print or type legibly; forms that are not legible, not complete, or unsigned will be returned. You must maintain a copy of the completed NOI form for your records.

Section A - NOI Status and Application Fee (*Application fee must be included to be considered complete*)

☐ **NEW PROJECT** - No prior NOI submitted. (*New Project Fee includes first annual fee*).

Less Than Threshold

☐ NEW – Single-county: $50.00

☐ NEW – Multi-counties: $100.00

Greater than Threshold

☐ NEW – Single-county: $500.00

☐ NEW – Multi-counties: $1,200.00

☐ **EXISTING, NOI Number: M T G 8 7 __ __ __ __**

Less Than Threshold

☐ RENEWAL – Single-county: $25.00

☐ RENEWAL – Multi-counties: $50.00

☐ Resubmitted -$500.00

Greater than Threshold

☐ RENEWAL – Single-county: $250.00

☐ RENEWAL – Multi-counties: $600.00

☐ Modification $500.00

Section B - Site (Pesticide Activity) Information (*See instruction sheet)*:

Site (Pesticide Activity) Name _____

Site Location (*T/R/S if no address*): _____

(*Centroid*): Latitude _____ Longitude _____

Nearest City or Town_____ Zip Code _____County _____

Is any part of the site located on or within the boundaries of Indian Lands? ☐ Yes ☐ No

NOTE: USEPA holds permitting authority for Indian lands in Montana. If **all of this site is within the boundaries of an Indian Reservation, no NOI is required for the State of Montana and permitting must be pursued with the EPA, only.*

***Check one, below*:**

☐ NOI coverage under the PGP for pesticide application within a single county as described above.

☐ NOI coverage for multiple counties (*Complete Section D for all additional counties).*

Section C - Applicant (Owner/Operator) Information

Agency Use

NOI No.:

Owner/Operator Name _____

Mailing Address _____

City, State, and Zip Code _____

Applicant contact person *(name, title)* _____

Phone Number (____) _____ E-mail (*optional*) _____

Applicant is: (*Check all that apply - see definitions*) ☐ Owner ☐ Operator

Status of Applicant *(Check one)* ☐ Federal ☐ State ☐ Public ☐ Private ☐ Other (*specify*) _____

Standard Industrial Classification (SIC) Codes

(Provide the SIC code(s) which best reflects the industry activity for the owner/operator):

	SIC Code	Description		SIC Code	Description
1			2		

Section D - Additional Pesticide Activity Location Information (*only for applicants with multiple counties. Complete a line for each county requested*)

	Location Name	Location – Closest City, Zip code	County	Application Area Latitude/Longitude (Centroid)
1	*--- See Section B ---*			
	Note: Only applicants requesting multiple counties complete the following, add additional pages as necessary:			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Is any part of the site located on or within the boundaries of Indian Lands? ☐ Yes ☐ No

If yes list which counties: _____

NOTE*: *USEPA holds permitting authority for Indian lands in Montana. If **all of this site is within the boundaries of an Indian Reservation, no NOI is required for the State of Montana and permitting must be pursued with the EPA, only.*

FORM
NOI-Supp

Notice of Intent (NOI) Tier II Supplement
NOI Pesticide Application Supplement for Greater than Threshold
MTG870000

Section E - Pesticide Activity Location Information # ___ of ___

Agency Use
NOI No.:

If you are a Tier II facility, please complete a separate Section E for each county covered under this NOI that you may discharge pesticides into surface waters of the state. Otherwise proceed to Section F.

County Name _____

Pesticide Use Patterns for this establishment *(complete information for all that apply)*:

Use Pattern	Estimated Annual Treatment Area (Acres)
☐ 1. Piscicide or Other Nuisance Animals	
☐ 2. Weeds and Algae	
☐ 3. Aerial Pest Control (ie., Forest Canopy)	
4. Mosquitoes and Other Flying Insects	
☐ 4a. Chemical Larval Control	
☐ 4b. Chemical Adulticide	
☐ 4c. Biological Control	
☐ 5. R&D – Describe:	
☐ 6. Other – Describe:	

Attach a map (or maps) that delineate the potential area(s) of pesticide treatment.

Map of Extent of Each Activity Included? ☐ Yes, topographic map ☐ Yes, satellite map ☐ Yes, other:_____

Receiving Surface Water(s):

Within the location(s) identified above, identify which receiving surface waters you are requesting coverage for.

☐ Coverage is requested for all waters within this county.

☐ Coverage is requested only for the waters identified below.

Receiving Surface Water Name	Pesticide Use Pattern

☐ Coverage is requested for all waters in the specified area EXCEPT for:

Section F - CERTIFICATION FOR ALL OWNER/OPERATORS

Applicant Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Applicants Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
B. Title (Type or Print)	C. Phone No.
D. Signature	E. Date Signed

Section E - Tier II Pesticide Activity Location Information ADDITIONAL PAGE # ___ of ___	Agency Use NOI No.:

Please complete a separate Section E for each county covered under this NOI that you may discharge pesticides into surface waters of the state.

County Name _____

Pesticide Use Patterns for this establishment *(complete information for all that apply)*:

Use Pattern	Estimated Annual Treatment Area (Acres)
☐ 1. Piscicide or Other Nuisance Animals	
☐ 2. Weeds and Algae	
☐ 3. Aerial Pest Control (ie., Forest Canopy)	
4. Mosquitoes and Other Flying Insects	
☐ 4a. Chemical Larval Control	
☐ 4b. Chemical Adulticide	
☐ 4c. Biological Control	
☐ 5. R&D – Describe:	
☐ 6. Other – Describe:	

Attach a map (or maps) that delineate the potential area(s) of pesticide treatment.

Map of Extent of Each Activity Included? ☐ Yes, topographic map ☐ Yes, satellite map

☐ Yes, other: _____

Receiving Surface Water(s):

Within the location(s) identified above, identify which receiving surface waters you are requesting coverage for.

☐ Coverage is requested for all waters within this county.

☐ Coverage is requested only for the waters identified below.

Receiving Surface Water Name	Pesticide Use Pattern(s)

☐ Coverage is requested for all waters in the specified area EXCEPT for:

INSTRUCTIONS FOR
Form NOI – Notice of Intent for Pesticide Application (MTG870000)

IMPORTANT:

As per the federal Sixth Circuit Court of Appeals decision of January 2009, the application of pesticides in or over surface water is a discharge of a pollutant from a point source which requires a surface water discharge permit. The Department of Environmental Quality permits discharges to state surface water under the Montana Pollutant Discharge Elimination System (MPDES) program.

> ARM 17.30.1304(16) "*Discharge of a pollutant*" means any addition of any pollutant or combination of pollutants to state waters from any point source. This term does not include an addition of pollutants by any "indirect discharger," such as stormwater runoff or spray drift.
>
> ARM 17.30.1304(41) "*Point source*" means any discernible, confined, or discrete conveyance ... from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
>
> ARM 17.30.602(33) and ARM 17.30.702 (23) *"Surface waters"* are any water on the earth's surface including, but not limited to, streams, lakes, ponds, and reservoirs and irrigation drainage systems discharging directly into a stream, lake, pond, reservoir, or other water on the earth's surface. Water bodies used solely for treating, transporting, or impounding pollutants, such as wastewater treatment lagoons, are not considered surface water.

The Pesticide General Permit (PGP) is available to any owner or operator who discharges to state surface waters through the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (collectively "pesticides") in state surface waters when the application is for one of the following pesticide use patterns provided below. The requirements of the PGP are separated into two categories:

- Tier I - Requirements for all owner/operators.
- Tier II – Additional requirements for owners/operators that apply pesticides to an area greater than the treatment area annual threshold identified below.

#	Pesticide Use Pattern	Treatment Area Annual Threshold[1,2]
1	Piscicides and Other Nuisance Animals (i.e. zebra mussels)	10 acres
2	Weeds and Algae	100 acres
3	Aerial Pest Control (i.e. Forest Canopy)	1000 acres
4.	*Mosquito and Other Flying Insect Pests*	
4a.	Larvae chemical control	100 acres
4b.	Chemical adulticide	1000 acres
4c.	Biological control	6,400 acres
5.	Research & Development	10 acres
6	Other not classified	1000 acres

1. Calculations should include the area of the applications made to: (1) state surface waters *that contain water at the time of pesticide application* and (2) conveyances with a hydrologic surface connection to state surface water *at the time of pesticide application.* For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of treatment area.
2. Any pesticide discharge into waterbodies classified A-closed has a threshold of > 0 acres and is therefore subject to Tier II requirements.

Calculations for determining annual pesticide application area should include all applications made to state surface waters. For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of treatment area.

The Pesticide Notice of Intent Form (NOI form) is to be completed by the owner/operator of a pesticide activity to or over surface water that is eligible for coverage under the Department's *Pesticide General Permit (PGP)* as described above. The PGP and the owners/operators authorized under the PGP are on a five-year cycle for renewal, and the information must be adequate to include application areas for the life of the authorization –otherwise, a modification or additional NOI form will be required. PGP documents and related forms are available on the MDEQ website at: http://www.deq.mt.gov or from the Department at (406) 444-3080.

You must provide all of the information requested in the NOI form to be complete, including submittal of specified fees and completed certification by the appropriate signatory. Please type or print legibly; applications that are not legible or are not complete will be returned. Responses must be self-explanatory and must not refer exclusively to attached maps, plans, or documents. You must maintain a copy of the PGP and completed NOI Form for your records. Mail the completed NOI Form and fee to:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901

****

SPECIFIC ITEM INSTRUCTIONS

Section A – NOI Status and Application Fee

New Project

If this NOI is the first submitted for this project, it is considered a "new project". Check the appropriate box, which is based on two independent decisions as follows:

1. First, decide if your pesticide water coverage area annual amount will be "Less than Threshold" (Tier I) or "Greater than Threshold" (Tier II) as shown in the above table; and
2. Then decide if you want coverage within the boundaries of a single county, or under multiple counties (up to 20 contiguous counties).

Since the permit coverage will be for a five year period (unless modified or terminated), you should ensure that the areas identified in the NOI are as broad as possible. The Department will assign a permit number when the NOI is submitted. The permit number is a 9-digit code beginning with 'MTG87.'

Existing Project

Include the permit number that the Department assigned on any correspondence with the Department regarding this site. Indicate which of the permitting actions you are now requesting:

- If the Department has renewed the *Pesticide General Permit* (renewable on a 5-year basis), any owner/operator that wishes to continue coverage under this general permit must submit a NOI for renewal. Check whether it is (a) less than the threshold or greater than the threshold, and (b) for a single county or multiple counties.
- If the Department returned your NOI to you as deficient or incomplete, check Resubmitted.
- If there is a change in the facility or site information, check Modification.

Do not use this form to transfer permit coverage to a new owner or operator -- you must use Form PTN.

Section B –Site (Pesticide Activity) Information:

A site is the general area of pesticide application to water, within the confines of a single county. Identify the name of the site or what the pesticide activity project will be called (examples: the name of the county; the irrigation district; the watershed; or a water treatment plant's supply water). If the owner/operator wishes to obtain coverage for multiple counties, pick one county as the primary site under Section B and complete information about each additional site locations (i.e., counties) in Section D.

If the area to be treated is consistent year to year (for example, only in one specific lake) then the boundaries of the pesticide application can be the extent of coverage and the center location is for that body of water. If the area to be treated may vary (for example invasive species control), the center of the county should be identified as the site location.

The site location may be a physical mailing address, a description of how the site may be accessed, or the Township/Range/Section (T/R/S) of the center of the pesticide application area (PO boxes are not acceptable). Locational Sources include GPS, a USGS topographic map, and/or "Topofinder" from *http://nris.mt.gov/interactive.html*.

Section C – Applicant (Owner/Operator) Information:

Give the name, as it is legally referred to, of the person, business, public organization, or other entity that owns, operates, controls or supervises the site(s) described in Section B and Section D of this NOI form. **The permit will be issued to the entity identified in this section (Section C)**. The owner or operator assumes all liability for discharges from the site and compliance with the terms and conditions of the General Permit. If the owner or operator is other than a person or government entity, it must be registered with the Montana Secretary of State's office.

Complete the contact information as requested. Give the name, title, work phone number, and email address (optional) of a person who is thoroughly familiar with the operation of the facility or site activity or project and with the facts reported in this form, and who can be contacted by the Department for additional information. Those facilities with periodic changes in the contact person may provide only the Title for the contact person position instead of a person's name.

List the primary and secondary four-digit Standard Industrial Classification (SIC) Code(s) that best describe the business of the owner/operator. Also, provide a brief description in the space provided. At least one SIC code must be provided. See attached table for common SIC codes. A complete list of SIC Codes (and conversions from the newer North American Industry Classification System (NAICS)) can be obtained from the Internet at http://www.census.gov/epcd/www/naics.html, in paper form from the document entitled "Standard Industrial Classification Manual", Office Management and Budget, 1987, or at http://www.osha.gov/pls/imis/sicsearch.html.

Section D– Additional Pesticide Activity Location Information *(only for applicants with pesticide activity within multiple counties)*

Section D must be completed by any owner/operator who is requesting authorization under the PGP for pesticide activity within more than one county. The multiple counties must all be contiguous (either located within a general area or a linear project). Indicate if any pesticide activity in this district will occur within the boundaries of an Indian Reservation (please note that the USEPA regulates these wastewater discharges).

NOI TIER II Supplemental Information

Section E - Pesticide Activity Location Information

Every Tier II owner/operator must complete a Section E for every county that needs authorization under the PGP. An identification number corresponding to the site locations listed in Section D should be assigned for each Section E. For example, if there were nine counties requested, the 3rd location listed in Section D should be identified as "#3 of 9" at the top of this form (in shading).

Identify the name of the county.

Pesticide Use Patterns for this Establishment:
Check the box for each use pattern that may apply to your operations within that county, and provide an estimate of the annual water treatment area (in acres) for each. **Note that the projection is an estimate of annual treatment area each year for the five-year permit cycle**. Also, please note that you need to count each pesticide application activity as a separate activity for the calculation. (For example, applying pesticides twice a year to a ten-acre site would be counted as twenty acres of treatment area.) Indicate the location of the pesticide application for each Pattern Use. You may use the center (centroid) location for that pesticide use pattern, or provide a beginning and end point.

A map (or maps) delineating the potential area(s) of pesticide discharge into water over the next five years is required. If work may occur within the entire county for one pattern use, outline the county. If the pesticide activity may occur only in discrete locations, outline those locations.

Receiving Surface Water:
Every potential receiving surface water body for the next five years must be identified, as requested. The owner/operator can request all waters within the county, all waters within the county except certain waters, or identify specific water bodies. **Please be aware that discharge to a waterbody that is not identified in the NOI is prohibited, and would require the owner/operator to submit a modification or a new NOI.**

Section F - Certification

For all owner/operators (both Tier I and Tier II). The NOI form certification must be completed by a signatory for the owner/operator who is responsible for the authorization as identified under Section C. The requirement for a signatory is described in ARM 17.30.1323.

Common Standard Industrial Classification (SIC) Codes for Pesticide Applicators

Category	SIC	NAICS	Examples
Agricultural parties – general agricultural interests, farmers/producers, forestry, and irrigation	01 - 08	111 Crop Production	Producers of crops mainly for food and fiber
	0811	113110 – Timber Tract Operations	The operation of timber tracks for the purposes of selling standing timber
	0831	113210 – Forest Nurseries Gathering of Forest Product	Growing trees for reforestation and/or gathering forest products
Public Health Parties (includes mosquito or other vector control districts and commercial applicators that service these)	4971	221310 – Water Supply for Irrigation	Operating irrigation systems
	9431	923120 – Administration of Public Health Programs	Government establishments
Resource Management Parties (includes state departments of fish and wildlife, pesticide regulation, environmental agencies, and universities)	9511	924110 – Administration of Air and Water Resource and Solid Waste Management Programs	Government establishments
Public Health Parties	9431	923120 – Administration of Public Health Programs	Government Establishments
	9512	924120 – Administration of Conservation Programs	Government Establishments
Utility Parties	41 - 49	221 – Utilities	Provide electric power, natural gas, steam supply, water supply, and sewage removal through a permanent infrastructure of lines, mains, and pipes.

Attachment C – NOI and Acknowledgement Letter from EPA/State

Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor
Richard H. Opper, Director

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

March 28, 2012

Tony Cox
Aquatic Invasive Plants Task Force
P.O. Box 519
Thompson Falls, MT 59873

RE: Pesticide Discharge Permit NOI #MTG870011
Sanders County

Dear Mr. Cox:

This letter serves as confirmation that the Montana Department of Environmental Quality - Water Protection Bureau (Department) has received a complete Notice of Intent (NOI) package on February 17, 2012. You are hereby authorized to discharge pesticide to state surface waters in conformance with the Montana Pesticide General Permit (PGP) and the information provided in your NOI.

Based on the information you provided in the NOI, your pesticide application activities are classified as Single-County, Greater than Threshold. Please be aware that as a facility that is greater than threshold you have additional requirements including the submittal of an annual report (AR3) by January 28th following every calendar year.

Receipt by the Department of a complete NOI package constitutes a full agreement by the owner/operator to meet and comply with all requirements in the PGP. A copy of (or access to) the PGP, your signed NOI form, and this confirmation letter must be accessible for Department review upon request. For administrative purposes, you have been assigned the NOI number listed above. Please include this number on any relevant future correspondence with the Department.

The PGP expires on October 31, 2016, at which time all permittees must have submitted a renewal application for continued coverage. Coverage under the PGP remains in effect until the owner/operator submits a Notice of Termination (NOT) certifying that they are no longer subject to this permit. **Failure to submit a completed NOT will result in the continued assessment of annual permit fees, which will be invoiced to the owner/operator in arrears.**

Any violations of the conditions of this authorization may be subject to an enforcement action pursuant to the applicable provisions of the Montana Water Quality Act. Any modification of the activity described in your application must receive prior written approval from the Department.

If you have questions, you may contact me at (406)444-4626 or jeryan@mt.gov .

Sincerely,

Jeff Ryan
Water Quality Specialist
Water Protection Bureau
Department of Environmental Quality

Montana Department of ENVIRONMENTAL QUALITY

WATER PROTECTION BUREAU

Agency Use
NOI No.:
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM
NOI

Notice of Intent (NOI)
Pesticide Application
MTG870000

The NOI form is to be completed by the owner or operator of pesticide activity to or over water that is eligible for coverage under the Montana Department of Environmental Quality's *Pesticide General Permit* (PGP). **Please read the attached instructions before completing this form**. **Also see the instructions for the thresholds for completing theNOI-Tier II Supplement**. You must print or type legibly; forms that are not legible, not complete, or unsigned will be returned. You must maintain a copy of the completed NOI form for your records.

Section A - NOI Status and Application Fee (*Application fee must be included to be considered complete*)

☐ **NEW PROJECT** - No prior NOI submitted. (*New Project Fee includes first annual fee*).

Less Than Threshold		*Greater than Threshold*	
☐ NEW – Single-county:	$50.00	■ NEW – Single-county:	$500.00
☐ NEW – Multi-counties:	$100.00	☐ NEW – Multi-counties:	$1,200.00

☐ **EXISTING, NOI Number: M T G 8 7 __ __ __ __**

Less Than Threshold		*Greater than Threshold*	
☐ RENEWAL – Single-county:	$25.00	☐ RENEWAL – Single-county:	$250.00
☐ RENEWAL – Multi-counties:	$50.00	☐ RENEWAL – Multi-counties:	$600.00

☐ Resubmitted -$500.00 ☐ Modification $500.00

Section B - Site (Pesticide Activity) Information *(See instruction sheet)*:

Site (Pesticide Activity) Name Noxon Rapids & Cabinet Gorge Reservoirs (Clark Fork River)

Site Location (*T/R/S if no address*): _____

(*Centroid*): Latitude _____ Longitude _____

Nearest City or Town Trout Creek Zip Code 59874 County Sanders

Is any part of the site located on or within the boundaries of Indian Lands? ☐ Yes ■ No

NOTE*: *USEPA holds permitting authority for Indian lands in Montana. If **all of this site is within the boundaries of an Indian Reservation, no NOI is required for the State of Montana and permitting must be pursued with the EPA, only.*

***Check one, below*:**

■ NOI coverage under the PGP for pesticide application within a single county as described above.

☐ NOI coverage for multiple counties (C*omplete Section D for all additional counties).*

Section C - Applicant (Owner/Operator) Information

Agency Use

NOI No.:

Owner/Operator Name Aquatic Invasive Plants Task Force, c/o Sanders County

Mailing Address PO Box 519

City, State, and Zip Code Thompson Falls, MT 59873

Applicant contact person *(name, title)* Board of County Commissioners

Phone Number (406) 827-6942 E-mail (*optional*)

Applicant is: (*Check all that apply - see definitions*) ☐ Owner ☑ Operator

Status of Applicant *(Check one)* ☐ Federal ☐ State ☐ Public ☐ Private ■ Other (*specify*) County

Standard Industrial Classification (SIC) Codes

(Provide the SIC code(s) which best reflects the industry activity for the owner/operator):

	SIC Code	Description		SIC Code	Description
1			**2**		

Section D - Additional Pesticide Activity Location Information (*only for applicants with multiple counties. Complete a line for each county requested*)

	Location Name	Location – Closest City, Zip code	County	Application Area Latitude/Longitude (Centroid)
1	*--- See Section B ---*			
Note: Only applicants requesting multiple counties complete the following, add additional pages as necessary:				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Is any part of the site located on or within the boundaries of Indian Lands? ☐ Yes ■ No

If yes list which counties:

****NOTE***: *USEPA holds permitting authority for Indian lands in Montana. If **all** of this site is within the boundaries of an Indian Reservation, no NOI is required for the State of Montana and permitting must be pursued with the EPA, only.*

FORM
NOI-Supp

Notice of Intent (NOI) Tier II Supplement
NOI Pesticide Application Supplement for Greater than Threshold
MTG870000

Section E - Pesticide Activity Location Information # 1 of 1

Agency Use
NOI No.:

If you are a Tier II facility, please complete a separate Section E for each county covered under this NOI that you may discharge pesticides into surface waters of the state. Otherwise proceed to Section F.

County Name Sanders County

Pesticide Use Patterns for this establishment *(complete information for all that apply)*:

Use Pattern	Estimated Annual Treatment Area (Acres)
☐ 1. Piscicide or Other Nuisance Animals	
■ 2. Weeds and Algae	150 acres
☐ 3. Aerial Pest Control (ie., Forest Canopy)	
4. Mosquitoes and Other Flying Insects	
☐ 4a. Chemical Larval Control	
☐ 4b. Chemical Adulticide	
☐ 4c. Biological Control	
☐ 5. R&D – Describe:	
☐ 6. Other – Describe:	

Attach a map (or maps) that delineate the potential area(s) of pesticide treatment.

Map of Extent of Each Activity Included? ☐ Yes, topographic map ☐ Yes, satellite map ☑ Yes, other: _____

Receiving Surface Water(s):

Within the location(s) identified above, identify which receiving surface waters you are requesting coverage for.

■ Coverage is requested for all waters within this county.

☐ Coverage is requested only for the waters identified below.

Receiving Surface Water Name	Pesticide Use Pattern

☐ Coverage is requested for all waters in the specified area EXCEPT for:

Section F - CERTIFICATION FOR ALL OWNER/OPERATORS

Applicant Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Applicants Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
B. Title (Type or Print)	**C. Phone No.**
D. Signature	**E. Date Signed**

Attachment D – Adverse Incident Report

Attachment E – Corrective Action Log Template

Project Name:
PDMP Contact:

Date	Description of Problem triggering the Corrective Action	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Attachment F – PDMP Amendment Log Template

Project Name:
PDMP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Attachment G – Subcontractor Certifications/Agreements Template

SUBCONTRACTOR CERTIFICATION
PESTICIDE DISCHARGE MANAGEMENT PLAN

Project Number: _____

Project Name: _____

Decision-maker(s): _____

As a subcontractor, you are required to comply with the Pesticide Discharge Management Plan (PDMP) for any work that you perform for the above designated project. Any person or group who violates any condition of the PDMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the PDMP. A copy of the PDMP is available for your review.

Each subcontractor engaged in pesticide activities in the pest management area that could impact Waters of the United States must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the PDMP for the above designated project.

This certification is hereby signed in reference to the above named project:

Company: Clean Lakes, Inc._____

Address: PO Box 3548, Coeur d'Alene, ID 83816_____

Telephone Number: 208-665-1479_____

Type of pesticide application service to be provided: Aquatic pesticide applications_____

_____

_____

Signature:  _____

Title: Vice President_____

Date: July 31, 2012_____

Attachment H – Delegation of Authority Form Template

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Pesticide General Permit, for the _____ project. The designee is authorized to sign any reports, other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix B, Subsection B.11.A of EPA's Pesticide General Permit (PGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix B, Subsection B.11.A.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the pest management area, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

Attachment I – Annual Reports and Other Record Keeping

The following is a list of records you should keep at your site and available for inspectors to review:

- Copies of Annual Reports
- Records as required in PGP Part 7.4

Check your permit for additional details

7: PRODUCT LABEL AND MSDS

AQUATIC HABITAT MANAGEMENT

AQUATHOL® K

AQUATIC HERBICIDE

ACTIVE INGREDIENT:	
Dipotassium salt of endothall*	40.3%
OTHER INGREDIENTS:	59.7%
TOTAL	100.0%

*7-oxabicyclo [2.2.1]heptane-2,3-dicarboxylic acid equivalent 28.6%
Contains 4.23 lbs. dipotassium endothall per gallon

KEEP OUT OF REACH OF CHILDREN

DANGER

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.
- 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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 INHALED:

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

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 866-673-6671 (Rocky Mountain Poison Control Center) for emergency medical treatment information.

See inside for additional precautionary statements.

NOTE TO PHYSICIAN: Measures against circulatory shock, respiratory depression, and convulsion may be needed.

EPA Registration No. 70506-176 **EPA Establishment No. 62171-MS-003**

Net Contents: 2.5 Gallons

UPI

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406
1-800-438-6071 • www.upi-usa.com

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. AVOID BREATHING VAPORS OR SPRAY MIST. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS.

Personal Protective Equipment (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks,
- Chemical-resistant gloves made of any waterproof material,
- Protective eyewear and,
- a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any N, R, P, or HE filter.

  Exception: During application, the respirator need not be worn, provided that the pesticide is applied in a manner (such as direct metering or subsurface release from the rear of a vessel that is moving into the wind) such that the applicator will have no contact with the pesticide.

See Engineering Controls for additional requirements.

User Safety Requirements:

Follow the manufacturers' instructions for cleaning/maintaining PPE. If no such instructions for washable exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

Engineering Controls:

When mixers and loaders use a closed system designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturers written operating instructions, the handlers need not wear a respirator, provided the required respirator is immediately available for use in an emergency such as a spill or equipment breakdown.

User Safety Recommendations:

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. This pesticide is toxic to wildlife.

Do not contaminate water by cleaning of equipment or disposal of equipment wash waters or rinsate.

PRODUCT INFORMATION

Aquathol K is a liquid concentrate soluble in water which is effective against a broad range of aquatic plants.

Dosage rates indicated for the application of Aquathol K are measured in "Parts Per Million" (ppm) of dipotassium endothall. Only 0.5 to 5.0 ppm are generally required for aquatic weed control.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Avoid contact with or drift to other crops or plants as injury may result.

Wash out spray equipment with water after each operation.

Not for use in brackish or saltwater.

Treated water can be used for sprinkling bentgrass immediately.

HOW TO APPLY:

Aquathol K is a contact herbicide; consequently, do not apply before weeds are present. Application as early as possible after weeds appear and are actively growing is recommended for best results.

If an entire pond is treated at one time, or if the dissolved oxygen level is low at time of application, decay of weeds may remove enough oxygen from the water, causing fish to suffocate. Water containing very heavy vegetation should be treated in sections to prevent suffocation of fish. Sections should be treated 5-7 days apart. Carefully measure size and depth of area to be treated and determine amount of Aquathol K to apply from chart.

Aquathol K should be sprayed on the water or injected below the water surface and should be distributed as evenly as possible. It may be applied as a concentrate or diluted with water depending on the equipment. Some dilution will give better distribution. For best results apply when water is quiescent and/or flows are minimal.

In instances where the weed(s) to be controlled is an exposed surface problem (i.e., some of the broad-leaved pond weeds) coverage is important. For best results apply the concentrate or with the least amount of water compatible with the application equipment.

Necessary approval and/or permits should be obtained in states where required.

Drinking Water (Potable Water)

- Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The drinking water (potable water) restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of endothall in the water is less than the MCL (Maximum Contamination Level) of 0.1 ppm. Applicators should consider the unique characteristics of the treated waters to assure that endothall concentrations in potable drinking water do not exceed 0.1 ppm at the time of consumption.
- For applications of endothall, the drinking water setback distance from functioning potable water intakes is greater than or equal to 600 feet.
- **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.

Only use higher rates when making treatments to small areas with an increased potential for rapid dilution or when making long and narrow applications such as for boat lanes or shoreline treatments where dilution may reduce the exposure of plants and the herbicide.

Use lower rates for large contiguous treatment blocks or in protected areas such as coves where reduced water movement will not result in rapid dilution of the herbicide from the target treatment area or when treating entire lakes or ponds.

AQUATIC WEEDS CONTROLLED AND DOSAGE RATE CHARTS

Aquathol K is recommended for the control of the following aquatic weeds in drainage canals, ponds and lakes at the rates indicated. Since the active ingredient is water soluble and tends to diffuse from the treated area, select the dosage rate applicable to the area to be treated. Use the lower rate in each range of rates where the growth is young and growing and/or where the weed stand is not heavy. Marginal treatments of large bodies of water require higher rates as indicated.

	RATES			
Aquatic Weed	Entire Pond/Lake or Large Area Treatment	Gallons per Acre Ft.	Spot or Lake Margin Treatment	Gallons per Acre Ft.
Bur Reed, Sparganium spp.	3.0-4.0 ppm	1.9-2.6 gal.	4.0-5.0 ppm	2.6-3.2 gal.
Coontail, Ceratophyllum spp.	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Horned Pondweed, Zannichellia palustris	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Hydrilla, Hydrilla verticillata	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Hygrophila, Hygrophila polysperma	4.0-5.0 ppm	2.6-3.2 gal.	5.0 ppm	3.2 gal.
Milfoil, Myriophyllum spp.	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Naiad, Najas spp.	1.0-3.0 ppm	0.6-1.9 gal.	2.0-4.0 ppm	1.3-2.6 gal.
Pondweed, Potamogeton spp.	0.5-3.0 ppm	0.3-1.9 gal.	1.5-4.0 ppm	1.0-2.6 gal.
Including:				
American, P. nodosus	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Largeleaf (Bass Weed), P. amplifolius	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Curlyleaf, P. crispus	0.5-1.5 ppm	0.3-1.0 gal.	1.5-3.0 ppm	1.0-1.9 gal.
Flatstem, P. zosteriformis	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Floating-leaf, P. natans	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Illinois, P. Illinoensis	1.5-2.5 ppm	1.0-1.6 gal.	2.5-3.5 ppm	1.6-2.3 gal.
Narrowleaf, P. pusillus	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Threadleaf, P. filiformis	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Sago, P. pectinatus	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Variable Leaf, P. diversifolius	1.0-2.0 ppm	0.6-1.3 gal.	2.0-3.0 ppm	1.3-1.9 gal.
Parrotfeather, Myriophyllum aquaticum	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.
Water Stargrass, Heteranthera spp.	2.0-3.0 ppm	1.3-1.9 gal.	3.0-4.0 ppm	1.9-2.6 gal.

LAKES AND PONDS

Restrictions for Lakes and Ponds Only:

Do not contaminate water intended for domestic purposes.

Do not use treated water for animal consumption or for domestic purposes within the following periods:

0.5 ppm dipotassium salt — 7 days after application

4.25 ppm dipotassium salt — 14 days after application

5.0 ppm dipotassium salt — 25 days after application

RATE OF APPLICATION — LAKES AND PONDS

The following chart indicates the total quantity of material to be applied.

APPROXIMATE GALLONS OF AQUATHOL K FOR ONE ACRE (208' X 208') TREATMENT

	DOSAGE IN GALLONS FOR VARIOUS CONCENTRATIONS IN PPM						
DEPTH	0.5 ppm	1.0 ppm	1.5 ppm	2.0 ppm	3.0 ppm	4.0 ppm	5.0 ppm
1 ft.	0.3	0.6	1.0	1.3	1.9	2.6	3.2
2 ft.	0.6	1.3	1.9	2.6	3.8	5.1	6.4
4 ft.	1.3	2.6	3.8	5.1	7.7	10.2	12.8
6 ft.	1.9	3.8	5.8	7.6	11.5	15.3	19.2

DRAINAGE CANALS

Restrictions for Drainage Canals Only:

Do not contaminate water intended for domestic purposes.

Do not use treated water for domestic purposes within the following periods:

0.5 ppm dipotassium salt — 7 days after application

4.25 ppm dipotassium salt — 14 days after application

5.0 ppm dipotassium salt — 25 days after application

RATE OF APPLICATION — DRAINAGE CANALS

Apply in a manner to achieve the desired rate and adequate mixing so the product is distributed throughout the entire water column. Adequate concentration (rate) and exposure time (length of treatment) will impact the efficacy of the herbicide (endothall) on the target weed species. Although endothall is a contact herbicide adequate exposure time is critical. The rates and the length of treatment are guidelines to provide control of the target species and assume that the entire canal is treated. This rate chart has been developed based on Concentration Exposure Time (CET) data for endothall. The CET concept allows rates and the length of exposure to be adjusted for different treatment scenarios.

Target Weed: Milfoil (Myriophyllum spp.) Parrotfeather (Myriophyllum spp.) Pondweeds (Potamogeton spp.)	0.5-1.0 ppm	1.0-2.0 ppm	2.0-3.0 ppm	3.0-4.0 ppm	4.0-5.0 ppm	**Restriction** A maximum of 30 ppm per growing season, not to exceed 5 ppm per application. A minimum of a 7-day application interval, with no PHI.
Length of Treatment	48 hrs.	24 hrs.	12 hrs.	8 hrs.	6 hrs.	
Target Weed: Coontail (Ceratophyllum spp.) Horned Pondweed (Zannichellia spp.) Hydrilla (Hydrilla verticillata) Naiad (Najas spp.) Water Stargrass (Heteranthera spp.)	0.5-1.0 ppm	1.0-2.0 ppm	2.0-3.0 ppm	3.0-4.0 ppm	4.0-5.0 ppm	
Length of Treatment	72 hrs.	36 hrs.	18 hrs.	12 hrs.	8 hrs.	
Hygrophila (Hygrophila polysperma) may be suppressed at the higher application rates listed in this table.						

To calculate the amount of Aquathol K required for a particular treatment use the following formula;

[Cubic Feet per Second (CFS) X Length of Treatment (hrs.) X rate (ppm)] X 0.052947 = Gallons of Aquathol K needed for treatment

To calculate the amount of Aquathol K to be applied per hour use the following formula:

Gallons of Aquathol K per hour = Total gallons of Aquathol K/Length of Treatment (hrs.)

The "Directions For Use" of this product reflect the cumulative inputs from both historical field use and product testing programs. Actual field conditions may vary. Phytotoxicity is not expected, however all crop (species) and cultivars (varieties) have not been tested.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in the original container. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. Storage at temperatures below 32°F may result in the product freezing or crystallizing. Should this occur the product must be warmed to 50°F or higher and thoroughly agitated. In the event of a spillage during handling or storage, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Or

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

EMERGENCY TELEPHONE NUMBERS:

CHEMTREC: (800) 424-9300

MEDICAL: (866) 673-6671 Rocky Mountain Poison Control Center

IMPORTANT INFORMATION
READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNITED PHOSPHORUS, INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

ESL03252010 Rev. 7/21/2010

70506-176(101410-3854)

Made in U.S.A.

Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE
	  

Issued Date 07-Feb-2007 **Revision Date** 21-Dec-2010 **Revision Number:** 5

1. PRODUCT AND COMPANY IDENTIFICATION

UPI
630 Freedom Business Center
Suite 402
King of Prussia,PA 19406

Emergency Telephone Number
Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

Company Information	Contact Information	Phone Number	Available Hrs
UPI	Customer Service	1-800-438-6071	8:00 am to 5:00 pm EST

Product Name AQUATHOL® K Aquatic Herbicide
EPA Reg # 70506-176
Recommended Use Aquatic herbicide
Product Code 12-204

2. HAZARDS IDENTIFICATION

Emergency Overview

Causes irreversible eye damage
May be fatal if swallowed.
Harmful if inhaled
Harmful if absorbed through skin
Prolonged skin contact may cause local redness. May cause an allergic reaction in sensitive individuals.

DANGER!

Appearance Yellow, Brown. **Physical State** Liquid. **Odor** Slight chlorine.

Potential Health Effects

- Principle Routes of Exposure
- Inhalation
- Skin contact

Eyes	Causes irreversible eye damage..
Skin	May cause mild skin irritation. Repeated or prolonged exposure may cause severe skin irritation.. Prolonged contact can result in redness and blistering of skin..
Inhalation	Slightly toxic if inhaled.
Ingestion	Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Dipotassium endothall salt	2164-07-0	40.3	N/A

4. FIRST AID MEASURES

Eye Contact

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

Skin Contact

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

Inhalation

Move to fresh air
If person is not breathing, call 911 or an ambulance, then give artifical respiration.
Call a poison control center or doctor for further treatment advice.

Ingestion

Call a physician or Poison Control Center immediately
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
Never give anything by mouth to an unconscious person

Notes to Physician	No information available Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point	Not available
Autoignition Temperature	Not available
Flammability Limits in Air	Not available
Extnguishing Media	Use: Water spray, Carbon dioxide (CO2), Dry chemical,
Fire/Explosion Hazard	No information available
Hazardous Combustion Products	Extreme temperatures convert Endothall product to endothall anhydride which is a strong vessicant causing blistering of eyes, mucous membranes and skin.

NFPA **Health** 3 **Flammability** 0 **Instability** 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Environmental Precautions	Do not flush into surface water or sanitary sewer system. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinenet environmental permits..
Methods for Clean-up	Remove all ignition sources. Soak up with inert absorbent material. Ground and bond containers when transferring material. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling	Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Keep out of reach of children. Empty containers may contain hazardous residues.
Storage	Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Controls

Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. .

PESTICIDE APPLICATORS & WORKERS. THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170..

Personal Protective Equipment

Eye/face Protection
Tightly fitting safety goggles. or. Face-shield.

Skin Protection
Chemical resistant gloves. Long sleeved clothing. Long pants. Chemical resistant footwear plus socks. Chemical resistant apron.

Respiratory Protection
Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134. .

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow Brown	**Odor**	Slight chlorine
Physical State	Liquid	**pH**	7.4
Boiling Point/Range	>100 °C	**Melting Point/Range**	Not available
Specific Gravity	1.285	**Solubility**	Miscible
Evaporation Rate	Not available	**Vapor Pressure**	Not available
Vapor Density	Not available	**VOC Content**	Not available
Viscosity	Not available	**Molecular Weight**	No data available
Bulk Density	No data available	**Percent Solids**	Not available
Percent Volatiles	59.7		

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions

Conditions to Avoid
No information available.

Incompatible Materials
No materials to be especially mentioned

Hazardous Decomposition Products
Extreme temperatures may convert endothall product to endothall anhydride, a strong vessicant, causing blistering of eyes, mucous membranes and skin. .

Possibility of Hazardous Polymerization
None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Although no allergic skin reactions were observed in guinea pigs following exposure to this material in water, allergic skin reactions were observed following expsoure to this material in ethanol. Repeated application to the skin of rats produced severe skin irritation, liver, and kidney effects considered to be secondary to irritation, and increased mortality. Long-term dietary administration produced no adverse effects in rats. Dermal - Slightly toxic to Rabbits (LD50 2,000 mg/kg)
Skin irritation - Non-irritating to rabbits Inhalation - Slightly toxic to rats (4 hr LC50 0.83 mg/l) aerosol Eye irritation - Cause irreversible eye damage in rabbits. Endothall- Intentional swallowing of 40 ml led to death within 12-hours. Skin allergy was observed in guinea pigs following repeated exposures. Repeated dietary administration (via gelatin capsules) produced vomiting, diarrhea, sluggish movements, and liver, kidney and blood effects in dogs. Long-term dietary administration to rats and mice produced effects in the glandular stomach. High mortality rates and intestinal tumors considered to be secondary to the effects in the stomach were observed in mice. Long-term application to the skin of mice produced no tumors. No birth defects were observed in the offspring of rats exposed orally during pregnancy, even at dosages that produced adverse effects on the mothers. Skeletal anomalies were observed in the offspring of rabbits and mice exposed orally during pregnancy, but only at dosages that produced adverse effects in the mothers. No genetic changes were observed in tests using bacteria, animal cells or animals.

Chronic Toxicity

Carcinogenicity

There are no known carcinogenic chemicals in this product

12. ECOLOGICAL INFORMATION

Ecotoxicity

Endothall dipotassium salt ecotoxicity

Acute Contact Toxicity Honey Bee (Apis mellifera)
For endothall acid, mono-amine salt, and dipotassium salt:
Practically non-toxic

Acute Toxicity Avian
Mallard duck(Anas platyrhynchos), LD50 = 328 mg/kg

Acute Toxicity Freshwater Fish
Bluegill sunfish(Lepomis macrochirus),flow-thru, EC50 = 1071 ppm
Rainbow trout(Oncorhynchus mykiss),flow-thru,EC50 =363 ppm
Chanel catfish(Ictalurus punctatus), static, EC50 = >100 ppm

Acute Toxicity Freshwater Invertebrates
Waterflea(Daphnia magna), flow-thru 48hr, EC50 = 223 ppm
Scud(Gammarius lacustris),static 48hr, EC50 = 313 ppm

Acute Toxicity Estuarine/Marine Fish
Sheepshead minnow(Cyrinodon variegates), flow-thru 96hr, EC50 = 340 ppm
Coho salmon(Oncorhynchus kisutch)static, 96hr, EC50 = >100ppm

Acute Toxicity Estuarine/Marine Invertebrates
Mysid shrimp(Mysidopsis bahia), flow-thru 96hr, EC50 = 257 ppm
Eastern oyster(Crassostrea virginica)shell deposition, flow-thru 96hr, EC50 = 335 ppm

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. .

Contaminated Packaging

Non refillable container. Do not reuse this container. . Triple rinse or pressure rinse promptly after emptying. . Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. .

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Pesticides, liquid, toxic. n.o.s. (Endothal)
Hazard Class	6.1
UN-No	2902
Packing Group	PG III
Reportable Quantity (RQ):	1,000 lbs

ICAO

UN-No	2902
Proper Shipping Name	Pesticide, liquid, toxic, n.o.s. (Endothall)
Hazard Class	6.1
Packing Group	PG III

IATA

UN-No	2902
Proper Shipping Name	Pesticide, liquid, toxic, n.o.s. (Endothall)
Hazard Class	6.1
Packing Group	PG III
ERG Code	6L

IMDG/IMO

Proper Shipping Name	Pesticide, liquid, toxic, n.o.s. (Endothall)
Hazard Class	6.1
UN-No	2902
Packing Group	PG III
EmS No.	F-A, S-A

15. REGULATORY INFORMATION

International Inventories

Dipotassium endothall salt

NDSL	Listed
EINECS/ELINCS	Listed

USA

Federal Regulations

SARA 313
Y

Chemical Name	CAS-No	Weight %
Dipotassium endothall salt	2164-07-0	40.3

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	No
Acute Health Hazard	Yes
Fire Hazard	No

Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any HAPs.

CERCLA
RCRA
Pesticide Information

State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know
International Regulations
Mexico - Grade Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

Revision Date 21-Dec-2010

Revision Summary
Update section 2 Update section 8

UPI, Inc. believes that the information and recommendations container herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPI, Inc. UPI, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of MSDS

ALLIGARE

TRICLOPYR 3

Specimen Label

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

ACTIVE INGREDIENT:

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

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

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

EPA Reg. No. 81927-13

ALB EPA Est. No. 42750-MO-001
BT EPA Est. No. 37429-GA-001
BO EPA Est. No. 37429-GA-002
CSI EPA Est. No. 53883-TX-002

KEEP OUT OF REACH OF CHILDREN

DANGER / PELIGRO

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

FIRST AID	
If in eyes	• 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
NOTE TO APPLICATOR: Allergic skin reaction is not expected from exposure to spray solutions of Alligare Triclopyr 3 herbicide when used as directed.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

Manufactured for: Alligare, LLC • 13 N. 8th Street • Opelika, AL 36801

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers who handle this pesticide must wear:
- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical resistant gloves (≥ 14 mils) such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are given, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

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

For aquatic uses, under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may contribute to fish suffocation. This loss can cause fish suffocation. Therefore, to minimize this hazard, do not treat more than one-third to one-half of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State agency for fish and game before applying to public water to determine if a permit is needed.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store the product near heat or open flame.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
- Coveralls
- Chemical-resistant gloves (≥ 14 mils) such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses.
For applications to non-cropland areas, do not enter or allow others to enter the treated area until sprays have dried.

GENERAL INFORMATION

Alligare Triclopyr 3 is used to control unwanted woody plants, aquatic plants, and annual and perennial broadleaf weeds:
- in Forests
- in Industrial Non-crop areas including industrial manufacturing and storage sites
- in Rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, and railroads
- in Fence rows
- in Non-irrigation ditch banks
- around Farm buildings
- on Christmas tree plantations
- on Wetland sites in production forests and industrial non-crop areas
- in Aquatic sites such as ponds, lakes, reservoirs, non-irrigation canals, and ditches which have little or no continuous outflow

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

GENERAL USE PRECAUTIONS

- Obtain required permits: Consult with appropriate state or local water authorities before applying this product to public waters. State or local public agencies may require permits.
- Do not apply this product through any type of irrigation system.
- Do not apply to ditches or canals used to transport irrigation water. It is permissible to treat non-irrigation ditch banks.

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

APPLICATION DIRECTIONS

RATES

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

Maximum Application Rates

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

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

[2] For forestry uses, do not apply more than 6 lb a.e. of triclopyr (2 gallons of Alligare Triclopyr 3) per acre per year.

[3] For all terrestrial uses other than rangeland, pasture, forestry sites, and grazed areas, a maximum of 9 lb a.e. of triclopyr (3 gallons of Alligare Triclopyr 3) per acre per year may be applied.

SPRAY ADDITIVES

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

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

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

TANK MIXES

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

Tank Mixing Recommendations:

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

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

SPRAY DRIFT MANAGEMENT

AVOID INJURIOUS DRIFT

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

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

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

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

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

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

AERIAL DRIFT REDUCTION ADVISORY

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

Controlling Droplet Size:

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

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

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

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

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

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

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

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

APPLICATION EQUIPMENT AND TECHNIQUES

BROADCAST APPLICATIONS
Aerial Application: When making aerial applications on rights-of-way or other areas near susceptible crops, apply through a Microfoil[1] or Thru-Valve[1] boom, or use an agriculturally approved drift control agent. Other drift reducing systems or thickened sprays prepared by using high viscosity inverting systems may be used if they are made as drift-free as are mixtures containing agriculturally approved thickening agents or applications made with the Microfoil or Thru-Valve boom. Keep spray pressures low enough to provide coarse spray droplets. Spray boom should be no longer than 3/4 of the rotor length. Spray only when the wind velocity is low (follow state regulations). Avoid application during air inversions. If a spray thickening agent is used, follow all use recommendations and precautions on the product label.

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

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

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

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

APPROVED USES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Forest Site Preparation (Not For Conifer Release)
To control susceptible woody plants and broadleaf weeds, apply up to 2 gallons per acre of Alligare Triclopyr 3 in a total spray solution of 1 to 30 gallons per acre. Alligare Triclopyr 3 may be applied at a rate of 1 to 1.5 gallons per acre in a tank mix combination with 1 to 2 gallons of Tordon 101 Mixture or 2,4-D 3.8 lb low volatile ester to broaden the spectrum of woody plants and broadleaf weeds controlled. Use of a nonionic agricultural surfactant is recommended for all foliar applications. See the **SPRAY ADDITIVES** section of **APPLICATION DIRECTIONS**.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 1: Woody Plants Controlled by Alligare Triclopyr 3

Alder	Chinquapin	Maleleuca (seedlings)	Sweetbay Magnolia
Arrowwood	Choke Cherry	Maples	Sweet Gum
Ash	Cottonwood	Mulberry	Sycamore
Aspen	*Crataegus* (hawthorn)	Oaks	Tan Oak
Bear Clover (Bearmat)	Dogwood	Persimmon	Thimbleberry
Beech	Douglas fir	Pine	Tulip Poplar
Birch	Elderberry	Poison Ivy	Wax Myrtle
Blackberry	Elm	Poison Oak	Western Hemlock
Black gum	Gallberry	Poplar	Wild Rose
Brazilian Pepper	Hazel	Salmonberry	Willow
Cascara	Hornbeam	Salt-bush (*Braccharis spp)*	Winged elm
Ceanothus	Kudzu[1]	Sassafras	
Cherry	Locust	Scotch Broom	
Chinese Tallow	Madrone	Sumac	

[1]For complete control, retreatment may be necessary.

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

Bindweed	Dandelion	Plantain	Tropical Sodaapple
Burdock	Elephant Ear	Purple Loosestrife	Vetch
Canada Thistle	Field Bindweed	Ragweed	Wild Lettuce
Chicory	Lambsquarter	Smartweed	
Curly Dock	Ligodium	Tansey Ragwort	

WETLAND SITES IN PRODUCTION FORESTS AND INDUSTRIAL NON-CROP AREAS

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

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

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

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

Follow all directions and use precautions on the surfactant label.

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

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

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

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

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

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

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

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

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

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

Low Volume Foliage Applications
For control of woody plants, mix up to 5 gallons of Alligare Triclopyr 3 in 10 to 100 gallons of

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

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

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

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

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

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

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

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

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

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

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

General Use Precautions for Christmas Tree Plantations
- Do not tank mix with 2,4-D for use in Christmas tree plantations.
- Only apply Alligare Triclopyr 3 to **established** Christmas trees that have been **planted at least one full year** prior to application.
- To prevent Christmas tree injury, take care to direct spray away from Christmas tree foliage to avoid contact.
- Do not use on newly seeded grass until well established as indicated by vigorous growth and development of secondary root system and tillering.
- Mow newly seeded turf (alleyways, etc.) two or three times before treatment with Alligare Triclopyr 3.
- Do not reseed Alligare Triclopyr 3 treated Christmas tree areas within three weeks after application.
- Do not use Alligare Triclopyr 3 if legumes, such as clover, are present and injury cannot be tolerated.

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

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

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

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

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

Table 3: Christmas Tree Plantation Application Rates and Species Controlled

Alligare Triclopyr 3		
2 pints per acre	**3 to 4 pints per acre**	**5 pints per acre**
Clover	Bindweed, Field[1]	Arrowwood[4]
Dandelion	Blackberry[2]	Aspen
Dock, Curly	Chicory[3]	Beech[4]
Lambsquarter	Fireweed	Birch[4]
Lespedeza	Ivy, Ground	Chinquapin
Plantain, Broadleaf	Lettuce, Wild	Cottonwood[4]
Plantain, Buckhorn	Oxalis	Elderberry
Ragweed, Common	Poison Ivy	Grape, Wild
Vetch	Smartweed[1]	Mulberry[4]
	Thistle, Canada[1]	Poplar[4]
	Violet, Wild	Sassafras[4]
	Virginia Creeper[2]	Sumac[4]
		Sycamore[4]

[1]Top growth control, retreatment may be necessary
[2]Use 4 pints per acre.
[3]Suppression
[4]Seedlings less than 2-3 years old

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

Aquatic Weeds Controlled by Alligare Triclopyr 3

Alligatorweed	Milfoil species	Purple loosestrife
American lotus	Nuphar (spatterdock)	Waterhyacinth
American frogbit	Parrotfeather[1]	Waterlilly
Aquatic sodaapple	Pickerelweed	Waterprimrose
Eurasian watermilfoil	Pennywort	

[1]Retreatment may be needed to achieve desired level of control.

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

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

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

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

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

Floating and Emerged Weed Control – Alligare Triclopyr 3 Rates

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Minimum Setback Distances (feet)					
	Concentration of Triclopyr Acid Equivalent in Water (ppm a.e.)				
Area Treated (acres)	0.75 ppm	1 ppm	1.5 ppm	2 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 the minimum setback distance using formula given for chosen application rate	Setback (ft) = [800 X ln (acres) – 160]/3.33	Setback (ft) = [800 X ln (acres) – 160]/2.5	Setback (ft) = [800 X ln (acres) – 160]/1.67	Setback (ft) = [800 X ln (acres) – 160]/1.25	Setback (ft) = [800 X ln (acres) – 160]

Example Calculations:

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

Setback in feet = [800 X ln (50 acres)] – 160
= [800 X 3.912] – 160
= 2970 feet

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

Setback in feet $= \frac{[800 \text{ X ln (50 acres)}] - 160}{3.33}$
$= \frac{[800 \text{ X } 3.912] - 160}{3.33}$
= 892 feet

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

STORAGE AND DISPOSAL

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

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

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

CONTAINER DISPOSAL:

[NONREFILLABLE CONTAINERS – 2.5, 30, 250, 265 gallons] - Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable container < 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

[REFILLABLE CONTAINER – 15 gallons]

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

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

LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY

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

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

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

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

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

EPA 20080620

MATERIAL SAFETY DATA SHEET

Emergency Phone: Chemtrec 800-424-9300 Effective Date: June 3, 2008

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Alligare Triclopyr 3**
DESCRIPTION: A liquid herbicide.
EPA Reg. No.: 81927-13

COMPANY IDENTIFICATION:
Alligare, LLC
13 North 8th Street
Opelika, AL 36801
888-255-4427

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Chemical Name	Formula	CAS #	Composition
Triclopyr	3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine salt	$C_{13}H_{19}Cl_3N_2O_3$	57213-69-1	44.4%
Triethylamine	*N,N*-Diethylethanamine	$C_6H_{15}N$	121-44-8	16.25%
Ethylenediaminetetraacetic Acid (EDTA)	*N,N'*-1,2-Ethanediylbis-[*N*-(carboxymethyl)glycine] trisodium salt	$C_{10}H_{16}N_2O_8$	60-00-4	2.5%

3. HAZARD IDENTIFICATION

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

ENVIRONMENTAL HAZARDS: Do not contaminate water when disposing of equipment wash water. Under certain conditions, oxygen depletion or loss due may result due to decomposition of dead plants, which may contribute to fish suffocation. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PHYSICAL OR CHEMICAL HAZARDS: Combustible liquid. May release toxic fumes if burned.

4. FIRST AID

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

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 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 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.

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

5. FIRE-FIGHTING MEASURES

Flash point (closed cup): 61°C (141°F)

Flammable Limits (LEL): Unknown

Fire and Explosion Hazards: May decompose in fire due to thermal decomposition releasing irritating and toxic gasses.

Means of Extinction: Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions: Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike runoff and do not allow runoff to enter sewers, storm drains or waterways. Foam and dry chemical extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Firefighting Equipment: Self-contained breathing apparatus with full face piece and full bunker gear.

Hazardous Combustion Products: Hydrogen chloride, oxides of nitrogen, chlorinated pyridine, phosgene.

NFPA Ratings: Health – 3 / Flammability – 2 / Reactivity – 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this MSDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering. Prevent material from contaminating soil or from entering sewage and drainage systems and bodies of water.

SMALL SPILLS: Absorb spill with sand, vermiculite or other inert absorbent. Place contaminated material into an appropriate container for disposal.

LARGE SPILLS: Dike large spills using absorbent or impervious materials such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, scrape up and place in an appropriate container for disposal. After removal, flush contaminated area thoroughly with water, observing all environmental regulations. Recover wash liquid with additional absorbent and place in container for disposal.

7. HANDLING AND STORAGE

Do not allow to come into contact with skin, eyes and clothing. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a secured storage area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Long-sleeved shirt, long pants and shoes plus socks, protective eyewear, and chemical resistant gloves ($\geq$ 14 mils) such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber.

General: Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been heavily contaminated with this product; do not reuse them. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light pink liquid
Odor: Slight ammonia-like
pH: 8.5 – 9.0
Specific Gravity: 1.14 g/ml @ 68°F
Flashpoint (Closed Cup): 61°C (141°F)
Solubility in Water: Soluble

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal use and transportation situations. May decompose if heated.

CONDITIONS TO AVOID: Temperatures above 40°C (105°F) and below 6°C (40°F).

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, oxides of nitrogen, chlorinated pyridine, phosgene.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong acids and oxidizing agents.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY
Oral LD_{50} (rat): > 1,500 mg/kg

ACUTE DERMAL TOXICITY
Dermal LD_{50} (rat): > 2,000 mg/kg

ACUTE INHALATION TOXICITY
Inhalation LC_{50} (rat): > 2.5 mg/L (4-hour)

EYE IRRITANT
Rabbit – Corrosive

SKIN IRRITATION
Rabbit – Slightly irritating

SENSITIZATION
Guinea Pig – Potential sensitizer after repeated exposure to concentrate

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY:
ACGIH: Not listed
IARC: Not listed
NTP: Not listed
OSHA: Not listed

MUTAGENIC DATA: Little evidence of mutagenic effects during *in vivo* and *in vitro* assays.

ADDITIONAL DATA: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

This herbicide is injurious to plants at extremely low concentrations. Nontarget plants may be adversely affected from drift and run-off. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water. Under certain conditions, oxygen depletion or loss due may result due to decomposition of dead plants, which may contribute to fish suffocation.

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

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Plastic Container - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Metal Container - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

14. TRANSPORT INFORMATION

Non-Bulk Shipments by Land: Not regulated by DOT

Bulk Shipments by Land:
DOT PROPER SHIPPING NAME: NA1993, COMBUSTIBLE LIQUID, N.O.S. (Contains TRIETHYLAMINE), 3, PG III

Shipments by Air or Vessel:
DOT PROPER SHIPPING NAME: UN1993, FLAMMABLE LIQUID, N.O.S. (Contains TRIETHYLAMINE), 3, PG III

DOT EMERGENCY RESPONSE GUIDE: 128

MARINE POLLUTANT: No

15. REGULATORY INFORMATION

FIFRA –
All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA Title III – Section 302 Extremely Hazardous Substances
Not Listed

SARA Title III – Section 311/312 Hazard Categories
Immediate, Delayed, Fire

SARA Title III – Section 312 Threshold Planning Quantity
N/A

SARA Title III – Section 313 Reportable Ingredients

Chemical Name	CAS Number	Concentration
Triethylamine	121-44-8	16.25%

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA –

Chemical Name	CAS Number	RQ	Concentration
Triethylamine	121-44-8	5000	16.25%
ETDA	60-00-4	5000	2.5%

CALIFORNIA PROP 65 STATUS –

This product does not contain any products known to the state of California to cause cancer or reproductive harm.

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

DISCLAIMER:

THE INFORMATION IN THIS MSDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT ALLIGARE, LLC TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS. JUDGMENTS AS TO THE SUITABILITY OF THE INFORMATION HEREIN FOR THE INDIVIDUAL'S OWN USE OR PURPOSES IS NECESSARILY THE INDIVIDUAL'S OWN RESPONSIBILITY. ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF SUCH INFORMATION, ALLIGARE, LLC EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR SUITABILITY OF SUCH INFORMATION FOR APPLICATION TO THE INDIVIDUAL'S PURPOSES OR THE CONSEQUENCES OF ITS USE.

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

8: SITE SPECIFIC SAFETY PLAN

SITE SPECIFIC SAFETY PLAN

2013 EURASIAN WATERMILFOIL/CURLYLEAF PONDWEED CONTROL

Noxon Rapids and Cabinet Gorge Reservoirs, Sanders County, Montana

1.0 ORGANIZATIONAL STRUCTURE (In compliance with 29 CFR 1910.120(b) (1) and (b) (2)): This chapter of the Site Specific Health and Safety Plan (HASP) describes lines of authority, responsibility, and communication for health and safety functions at this site. The purpose of this chapter is to identify the personnel involved in the development and implementation of the site health and safety plan and to describe their roles and responsibilities.

The organizational structure of this site's safety and health program is consistent with OSHA requirements in 29 CFR 1910.120(b) (2) and provides the following site-specific information:

* the general supervisor who has the responsibility and authority to direct all operations
* the site safety and health officer who has the responsibility and authority to develop and implement this HASP and verify compliance
* other personnel needed for cleanup operations and emergency response and their general functions and responsibilities
* the lines of authority, responsibility, and communication for safety and health functions

1.1 Roles and Responsibilities: All personnel and visitors on this site must comply with the requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this site are detailed in the following paragraphs.

Project Manager (PM): CLI's Project Manager (PM) for this site is ***Thomas McNabb.***

The PM has responsibility and authority to direct all work operations. The PM coordinates safety and health functions with the Site Safety and Health Officer (SSHO), has the authority to oversee and monitor the performance of the SSHO, and bears ultimate responsibility for the proper implementation of this HASP. The specific duties of the PM are:

Preparing and coordinating the site work plan; providing site supervisor(s) with work assignments and overseeing their performance; coordinating safety and health efforts with the SSHO; ensuring effective emergency response through coordination with the Emergency Response Coordinator (ERC); serving as primary site liaison with public agencies and officials and site contractors.

The qualified alternate Project Manager (PM) for this site is ***Thomas Moorhouse.***

Site Safety and Health Officer (SSHO)

The Site Safety and Health Officer (SSHO) for this site is ***Thomas Moorhouse.***

The SSHO has full responsibility and authority to develop and implement this HASP and to verify compliance. The SSHO reports to the Project Manager. The SSHO is on site or readily accessible to the site during all work operations and has the authority to halt site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

Managing the safety and health functions on this site; serving as the site's point of contact for safety and health matters; ensuring site monitoring, and effective selection and use of PPE; assessing site conditions for unsafe acts and conditions and providing corrective action; assisting the preparation and review of this HASP; coordinating with the Emergency Response Coordinator and others as necessary for safety and health efforts.

The qualified alternate Site Safety and Health Officer (SSHO) for this site is ***Thomas McNabb.***

Emergency Response Coordinator (ERC)

The Emergency Response Coordinator (ERC) for this site is ***Thomas Moorhouse***.

The ERC is responsible for assessing site conditions and directing and controlling emergency response activities and personnel in accordance with the Site Emergency Response Plan. The ERC reports to the Project Manager (PM). The ERC will ensure the emergency transport, and treatment of site personnel and will notify the appropriate emergency response units and management staff in accordance with the emergency response plan of this HASP. Specific duties of the ERC include:

Developing and reviewing the emergency response plan; ensuring effective emergency response; coordinating emergency response functions with the Site Safety and Health Officer (SSHO).

The qualified alternate Emergency Response Coordinator (ERC) for this site is ***Thomas McNabb.***

Site Workers: Site workers are responsible for complying with this HASP, using the proper PPE, reporting unsafe acts and conditions, and following the lines of authority established for this project site.

2.0 SITE CHARACTERIZATION AND JOB HAZARD ANALYSIS (In compliance with 29 CFR 1910.120(b)(4)(ii)(A), 1910.120(c) and 1910.120(i)): This section of the HASP identifies and describes safety and health hazards associated with site work. The purpose of characterization and job hazard analysis is to identify and quantify the health and safety hazards associated with each site task and operation, and to evaluate the risks to workers. With this information, risks are then eliminated if possible, or effectively controlled. The information contained in this section of the HASP is essential to effective preparation of all other sections of the HASP. This section site of the HASP includes:

* job hazard analysis
* chemical hazard information
* employee notification of hazards

The person responsible for site characterization and job hazard analysis at this site is ***Thomas Moorhouse***

2.1 Job Hazard Analysis: Table 2.1a contains the job hazard analysis information for this site and the planned hazard controls. This table lists each task or operation required for this site location. Chemical hazards and their known or anticipated concentrations are identified for each distinct combination of location and task/operation. Based on the task /operation at a particular location, anticipated physical hazards are also identified. Then, based on the best available knowledge of how that task/operation will be performed, the likelihood of exposure to the hazards identified for the task/operation at that location is indicated. The final section in Table 2.1a lists the control measures implemented to protect employees from the hazards identified. The information provided here is designed to satisfy the job hazard analysis requirements of 1910.120(b)(4)(ii)(A) and the workplace hazard assessment requirements of 1910.132(d).

Table 2.1b summarizes health hazard information for the Aquatic Herbicides active ingredients Triclopyr, and Endothall.

Table 2.1a: Site-Specific Job Hazard Analysis

TJM Number: 01	**Task/Operation** Submersed Vegetation Mapping	**Location Where Task/Operation Performed:** **Noxon Rapids Reservoir, Montana**
Date(s) this TJM Conducted:	**Employee Certifying this TJM** (in accordance with 1910.132(d)(2))	
July 2014	**Print Name:** **Thomas McNabb**	**Signature**

Chemical Hazards

Chemical Name	**Source**	**Concentration**	**Exposure Potential during Task/ Operation**
NONE	-		☐ Likely **X Unlikely**

Physical Hazards

Name of Physical Hazard	**Source**	**Exposure Potential during Task/ Operation**
Falling overboard	**Water, drowning**	☐ Likely **X Unlikely**

Control Measures Used

Engineering Controls: Follow State of Montana Boater Safety Procedures

Work Practices: Exercise care when launching and retrieving vessel from water, use caution on boat ramps, wear life jackets at all times when in boat, follow safe boating procedures.

Table 2.1a: Site-Specific Job Hazard Analysis
PPE: Have first aid kits, fire extinguisher and life jackets on board vessels.

Table 2.1a: Site-Specific Job Hazard Analysis		
TJM Number: 02	**Task/Operation** Onshore Loading and Handling	**Location Where Task/Operation Performed** **Noxon Rapids Reservoir, Montana**
Date(s) this TJM Conducted:	**Employee Certifying this TJM** (in accordance with 1910.132(d)(2))	
July 2014	**Print Name:** **Thomas McNabb**	**Signature**

Chemical Hazards

Chemical Name	**Source**	**Concentration**	**Exposure Potential during Task/ Operation**
Diquat and Endothall	**Totes, hoses, pumps**	**100%**	☐ Likely **X Unlikely**

Physical Hazards

Name of Physical Hazard	**Source**	**Exposure Potential during Task/ Operation**
Connecting/disconnecting hoses	**Fittings**	☐ Likely **X Unlikely**
Tripping over hoses	**Hoses**	☐ Likely **X Unlikely**
Slipping	**Trucks and boats**	☐ Likely **X Unlikely**

Control Measures Used

Engineering Controls: Use of absorbent mats, spill pans, and dikes to contain any spillage.

Work Practices: Exercise care when loading and handling, exercise care when moving and transporting equipment and use proper Personnel Protection Equipment to reduce exposure hazards. Coordinate actions with other handlers/Loaders. Follow Aquatic Herbicide Label instructions.

PPE: Eye Protection (glasses), Rubber Gloves, Rubber Boots, Full-length Protective Suit (Tyvek), and chemical resistant apron. Have first aid kits and eyewash kits at loading sites.

Table 2.1a: Site-Specific Job Hazard Analysis		
TJM Number: **01**	**Task/Operation** **Loading, Mixing and Handling of herbicide into boat and tanks.**	**Location Where Task/Operation Performed** **Sites: Noxon Rapids Reservoir, shore and in boat**
Date(s) this TJM Conducted:	**Employee Certifying this TJM** (in accordance with 1910.132(d)(2))	
July 2014	**Print Name:** **Thomas McNabb** **Signature**	

Chemical Hazards			
Chemical Name	**Source**	**Concentration**	**Exposure Potential during Task/ Operation**
Triclopyr liquid	**250 gallon totes** **30 gallon drums** **2.5 gallon containers**	**44.4%**	☐ Likely ☒ **Unlikely**

Physical Hazards		
Name of Physical Hazard	**Source**	**Exposure Potential during Task/ Operation**
Exposure to chemicals	**Handling, loading and mixing**	☐ Likely ☒ **Unlikely**
Falling down, tripping	**Uneven banks, hoses, pumps**	☐ Likely ☒ **Unlikely**
Chemical exposure	**Spills, leaks, inhalation**	☐ Likely ☒ **Unlikely**

Control Measures Used

Engineering Controls: Spill Kits in vehicles or at immediate loading site; Use of absorbent mats and dikes to contain any spillage or leakage. All equipment serviced and pre-checked for problems.

Work Practices: Exercise care when loading and handling, exercise care when moving and transporting equipment and use proper Personnel Protection Equipment to reduce exposure hazards.

PPE: Protective eyewear (glasses), chemical resistant cloves (≥ 14 mils), rubber boots, full-length protective overalls (Tyvek). Have first aid kits, soap and water and eye wash kits at loading sites and in boats.

Table 2.1a: Site-Specific Job Hazard Analysis

Table 2.1b Hazard Substance Information

TJM Number: 03	Task/Operation: On boat application	Location Where Task/Operation Performed: Noxon Rapids Reservoir, Montana
Date(s) this TJM Conducted: July 2014	Employee Certifying this TJM (in accordance with 1910.132(d)(2)) Print Name: Thomas McNabb Signature	

Chemical Hazards

Chemical Name	Source	Concentration	Exposure Potential during Task/ Operation
Diquat, Endothall	Totes, hoses, pumps	100%	☐ Likely X Unlikely

Physical Hazards

Name of Physical Hazard	Source	Exposure Potential during Task/ Operation
Tripping over hoses	Hoses	☐ Likely X Unlikely
Falling overboard	Water	☐ Likely X Unlikely

Control Measures Used

Engineering Controls: Locate pump, tank and hoses to reduce tripping hazards.

Work Practices: Exercise care when loading and handling, exercise care when moving and transporting equipment and use proper Personnel Protection Equipment to reduce exposure hazards. Follow Aquatic Herbicide Label instructions.

PPE: Eye Protection (glasses), Rubber Gloves, Rubber Boots, Full-length Protective Suit (Tyvek), Respirator Protective Apron. Have first aid kits and eye wash kits in the boats and appropriate floatation equipment.

Hazardous Substance Name	Characteristics of Substance	Route(s) of Entry	Target Organ(s) Effects	Exposure Limits	Exposure Signs & Symptoms
Endothall	Liquid	Skin contact, Ingestion, Inhalation	Skin, eyes, lungs	Corrosive	Causes irreversible eye damage, prolonged or frequently repeated skin contact may cause allergic reactions in some individuals
Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, trethylamine salt	Corrosive Signal Word DANGER	Skin contact, Ingestion, Inhalation, Eyes	Liver and kidney	Oral rat (male) LD 50 ~2,574 mg/kg Dermal rabbits LD50 >5,000 mg/kg	Skin and eye irritation, gastrointestinal irritation or ulceration when swallowed in large amounts

2.3 Employee Notification of Hazards and Overall Site Information Program: The information in Tables 2.1a and 2.1b is made available to all employees who could be affected by hazards prior to the time they begin their work activities. Modifications to these tables are communicated during routine briefing.

3.0 EMERGENCY RESPONSE PLAN (In compliance with 29 CFR 1910.120(b)(4)(ii)(H) and 29 CFR 1910.120(l): This is the site-specific emergency response plan. This chapter of the HASP describes potential emergencies at this site, procedures for responding to those emergencies, roles and responsibilities during emergency response, and training that workers must receive in order to follow emergency procedures. This chapter also describes the provisions this site has made to coordinate its emergency response planning with other contractors on site and with off-site emergency response organizations.

This emergency response plan is consistent with the requirements of paragraph (l) of HAZWOPER and provides the following site-specific information:

* pre-emergency planning
* on-site emergency response equipment and PPE
* emergency maps: evacuation routes and route to nearest hospital
* emergency roles and responsibilities
* emergency response procedures
* emergency decontamination, medical treatment and first aid
* emergency response training

3.1 Pre-emergency Planning: This site has been evaluated for potential emergency occurrences, based on site hazards and the tasks within the work plan.

Table 3-1 Potential Site Emergencies		
Type of Emergency	**Source of Emergency**	**Location of Source**
Chemical Spill	**Totes, Hoses, Pumps**	**All Loading and Handling Areas**
Physical Injury	**Falling, Tripping, Drowning**	**All Loading, Handling, and Application Sites**

3.2 On-Site Emergency Response Equipment: Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean-up. Emergency response equipment stocked on this site is listed in Table 3-2. The equipment inventory and storage locations are based on the potential emergencies described in Table 3-1. This emergency equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this site.

Any additional PPE required and stocked for emergency response is also listed in Table 3-2 below. During an emergency, the **Emergency Response Coordinator *Thomas Moorhouse*** is responsible for specifying the level of PPE required for emergency response. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Table 3-2 Emergency Equipment & Emergency PPE		
Emergency Equipment		
Specific Type	**Quantity Stocked**	**Location Stored**
Fire Extinguishers	**3**	**Boats, Trucks**
First Aid & Eye Wash Kits	**2**	**Boats, Truck**
Spill Kits	**2**	**Loading Area**
Emergency PPE		
Specific Type	**Quantity Stocked**	**Location Stored**
Tyvek Protective Suits	**50**	**Boats, Trucks**
Rubber Gloves	**25**	**Boats, Trucks**
Eye Protection	**15**	**Boats, Trucks**
Rubber Boots	**4**	**Boats, Trucks**
Respirators	**5**	**Loading Area**
Chemical Resistant Apron	**2**	**Loading Area**

Emergency Information:

• In case of any emergency, call 9-1-1, and follow dispatcher instructions.

• Pesticide Emergency: Call the **ChemTrec** (Chemical Transportation Emergency Center) emergency number (**1-800-424-9300**) for instruction on how to handle any pesticide emergency.

3.3 Emergency Planning Maps

Figure 3-3a Emergency Planning Map

A. Clark Fork Valley **Hospital** & Family Medicine Network: Bull River Family Medicine
1029 MT Highway 200, Noxon, MT - (406) 847-2100

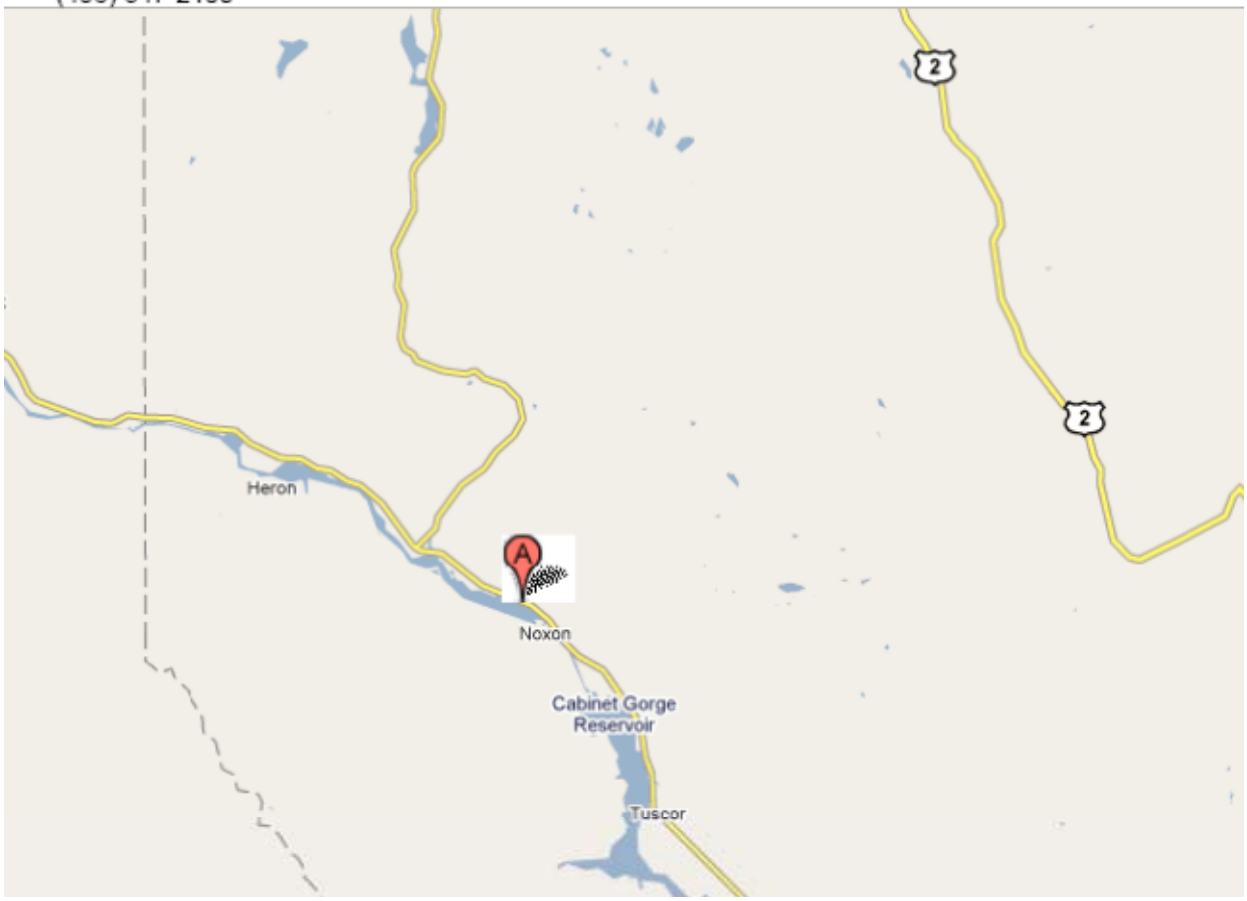

Figure 3-3b Driving Route to Nearest Hospital

Driving Route to Nearest Hospital:
Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine
1029 MT Highway 200, Noxon, MT - (406) 847-2100

North Shore or Trout Creek Boat Ramp: When working along the North Shore or Trout Creek Boat Ramp areas, take Highway 200 Northwest into Noxon, and the Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine is located at 1029 MT Highway 200, Noxon, MT.

Cabinet Gorge Reservoir: When working out of Cabinet Gorge Reservoir, return to Highway 200, go left, and take Highway 200 Northwest into Noxon, and the Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine is located at 1029 MT Highway 200, Noxon, MT.

3.4 Roles and Responsibilities for On-Site and Off-Site Personnel

Thomas Moorhouse has been designated the Emergency Response Coordinator. He is responsible for implementing the emergency response plan and coordinates emergency response activities on this site. He provides specific direction for emergency action based upon information available regarding the incident and response capabilities and initiates emergency procedures, including protection of the public and notification of appropriate authorities.

In the event of an adverse incident, the response will proceed in the following manner:

1. Stop all herbicide application activities and secure equipment to prevent spills or leaks.
2. If a person is exhibiting adverse effects as a result of herbicide application, call 911.
3. The applicator then must notify Montana Department of Agriculture immediately upon the discovery of a spill at (406) 444-5400.
4. If adverse effects are observed with fish or wildlife contact the MT Department of Fish, Wildlife and Parks office at (406) 444-2452

Limited On-Site Emergency Response Activities for spill response

- **Turn off all pumps and generator**
- **Close all valves**
- **Surround spill with containment dike**
- **Use absorbent mats to clean up spill**
- **Place in plastic containment bags**

Limited On-Site Emergency Response Activities for injury

- **Assess extent of injury**
- **Administer First-Aid, if appropriate**
- **Contact Emergency Medical Personnel**

- **Transport to:** **Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine**.

3.7 Emergency Decontamination, Medical Treatment and First Aid

Table 3-4 Emergency Contact Information

Table 3-4 Emergency Contact Information			
SITE PERSONNEL			
Title	**Contact**		**Telephone**
Emergency Response Coordinator	**Thomas Moorhouse**		**208-929-2757**
Project Manager	**Thomas Moorhouse Thomas McNabb**		**208-929-2757 208-929-2748**
Site Safety and Health Officer	**Thomas Moorhouse**		**208-929-2757**
OUTSIDE ASSISTANCE	**Contact**	**Address/Location**	**Telephone**
Chemtrec (Chemical Transportation Emergency Center)	**Poison control**		**1-800-424-9300**
Ambulance/EMS			**911**
Police			**911**
Fire			**911**
National Pesticide Telecommunication Network		**1-800-858-7358**	
National Spill Response Center		**1-800-454-8802**	
Primary Medical Facility	**Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine**	**1029 MT Highway 200, Noxon, MT.**	**(406) 847-2100**

The primary medical care facility for this site is Clark Fork Valley Hospital & Family Medicine Network: Bull River Family Medicine. The route to the facility is shown in Figure 3-3b.

Site personnel who are contaminated and need medical treatment will be decontaminated before being transported to a medical facility if decontamination does not delay life-saving treatment or aggravate the injury.

When emergency decontamination is performed, contaminated protective clothing and equipment is washed, rinsed and/or cut off. If an emergency victim is grossly contaminated with extremely toxic or corrosive material, the victim will be wrapped in blankets, plastic, or rubber to reduce potential exposure to other personnel.

Offsite medical treatment personnel will be alerted to the chemicals and hazards to which a victim has been potentially exposed. This will be done by sending relevant MSDS's and other

applicable hazard data with the victim or by having the victim accompanied by personnel who are familiar with the incident and the hazards.

This Safety Plan was developed by Clean Lakes, Inc.. Any questions regarding this plan should be addressed to Thomas Moorhouse, Clean Lakes, Inc., P. O. Box 3548, Coeur d'Alene, ID 83816 (Phone: 2086651475).

END OF APAP