

Attachment E – Notice of Intent

RECEIVED

JUN 09 2014

WATER QUALITY ORDER NO. 2013-0002-DWQ
 GENERAL PERMIT NO. CAG990005

DIVISION OF WATER QUALITY

STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
 (NPDES) PERMIT FOR RESIDUAL AQUATIC PESTICIDE DISCHARGES TO WATERS OF
 THE UNITED STATES FROM ALGAE AND AQUATIC WEED CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item A. New Applicator B. Change of Information: WDID# _____
 2 21APOOOL
 C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Town of Tiburon			
B. Mailing Address 1505 Tiburon Blvd			
C. City Tiburon	D. County Marin	E. State CA	F. Zip 94920
G. Contact Person Matthew Swalberg	H. E-mail address mswalberg@ci.tiburon.ca.us	I. Title Engineering Technician	J. Phone 415-435-7354

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip
G. E-mail address	H. Title	I. Phone	

IV. RECEIVING WATER INFORMATION

- A. Algaecide and aquatic herbicides are used to treat (check all that apply):
- Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
Name of the conveyance system: _____
 - Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
Owner's name: _____
Name of the conveyance system: _____
 - Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: Railroad Marsh Detention Basin

B. Regional Water Quality Control Board(s) where treatment areas are located
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 2
(List all regions where algaecide and aquatic herbicide application is proposed.)

V. ALGAEICIDE AND AQUATIC HERBICIDE APPLICATION INFORMATION

A. Target Organisms: _____

Cattails (Typha)

B. Algaecide and Aquatic Herbicide Used: List Name and Active ingredients

Imazamox (Trade Name: Clearcast)
(3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-)

C. Period of Application: Start Date September 1 End Date October 31, for the life of the permit

D. Types of Adjuvants Used: **Methylated Seed Oil**

VI. AQUATIC PESTICIDE APPLICATION PLAN

Has an Aquatic Pesticide Application Plan been prepared and is the applicator familiar with its contents?
 Yes No

If not, when will it be prepared? _____

VII. NOTIFICATION

Have potentially affected public and governmental agencies been notified? Yes No

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?
 YES NO NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure 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 or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Randell T. Harrison

B. Signature:  Date: 6-3-2014

C. Title: President of Harrison Engineering Inc.

XI. FOR STATE WATER BOARD STAFF USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:
<input type="checkbox"/> Lyris List Notification of Posting of APAP	Date _____	Confirmation Sent _____

Section	Pages	No. 1	Permit requirements	√ ³	Staff comments
VIII	B-10	C.10	Minimum content of BMPs: a. How to prevent pesticide spill and spill contamination; ✓ b. Ensure only minimum and consistent amount of pesticide used for targeted weeds; ✓ c. Plan for educating applicators on avoiding adverse effect from pesticide application; ✓ d. Plan on informing the farmers and agencies who have water rights on the receiving water; n/a e. Plan on preventing fish kill from pesticide application; ✓		
VI	S-6	C.11	a. Evaluation of alternatives: i. no action. ii. Prevention. n/a iii. Mechanical method. iv. Cultural method. n/a v. Biological control. vi. Pesticide control. b. Use least intrusive method of weed control; → Added to report c. Apply decision matrix concept for choosing the most appropriate formulation. → Added to report		

Notes:

1. Item in the permit.
2. Pesticides refer to algaecides and aquatic herbicides.
3. Check ✓ if APAP contains the required information.

APAP Review Check List for
Order 2013-0002-DWQ
Aquatic Weed Control Permit

Section	Page(s)	No. 1	Permit requirements	√3	Staff comments
II	3-4	C.1.	Describe the water system where the pesticide ² will be applied.		
III	4	C.2.	Describe the treatment area.		
IV	4	C.3.	Types of weeds to be controlled and why		
V	4-5	C.4.	- Pesticide products to be used. <i>Imazamox</i>		
			- Degradation byproducts of pesticide used if known		→ Added to report
			- Method of application. <i>Spot-spray</i>		
IV, V, & VI	4-6	C.5.	- Surfactant and adjuvants to be used		<i>Methylated seed oil or similar</i>
			Discuss factors influencing the decision of using pesticide for weed control.		
II	4	C.6.	- List of gates or control structures to be used in receiving water.		
			- Inspection schedule of the gates and control structures		→ Added to report.
n/a	n/a	C.7.	For those with SIP exception:		Inspected on quarterly basis.
			- exception period (beginning date to ending dates)		
			- justification for exception period		
			- describe plans to ensure compliance if applying pesticide outside the exception period.		
VII	6-8	C.8.	Describe monitoring program		
VII	8	C.9.	How to prevent sample contamination		→ Added to report

Town of Tiburon

AQUATIC PESTICIDE APPLICATION PLAN (APAP)

FOR THE STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM (NPDES) PERMIT FOR RESIDUAL AQUATIC PESTICIDE DISCHARGES FOR
AQUATIC WEED CONTROL TO WATERS OF THE UNITED STATES
GENERAL PERMIT # CAG990005

RAILROAD MARSH



Date Submitted: June 3, 2014

Revised on June 12, 2014

Prepared For:

Town of Tiburon
1505 Tiburon Blvd
Tiburon, CA 94920

Prepared By:

Harrison Engineering Inc.
399 Taylor Blvd, Suite 100
Pleasant Hill, CA 94523

Submitted to:

State Water Resources Control Board
NPDES Wastewater Unit
1001 I Street, 15th Floor
Sacramento, CA 95814

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Appendices

- Appendix A: Vicinity Map
- Appendix B: Site Map of Railroad Marsh
- Appendix C: Aquatic Pesticide Application Log Form
- Appendix D: Example Chain of Custody Form
- Appendix E: Railroad Marsh Management Plan
(Wetlands Research Associates, October 2001)
- Appendix F: Conditional Approval of Low-Threat-to-Water-Quality Activities
(U.S. Fish & Wildlife Service, July 2003).
- Appendix G: Proposed 3-Year Vegetation Eradication Program
(Aquatic Environments Inc.)
- Appendix H: 2006 Federal District Court Injunction

I. Background Information

This Aquatic Pesticide Application Plan (APAP) is a comprehensive plan developed by the discharger to comply with the provisions of Water Quality Order No. 2013-0002-DWQ, Statewide General National Pollutant Discharge Elimination System Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Applications, General Permit No. CAG990005, adopted by the State Water Resource Control Board on March 5, 2013 (hereafter referred to as the “General Permit”).

This APAP describes the project site, aquatic plant nuisances, aquatic herbicide products expected to be used, and the monitoring program and Best Management Practices (BMPs) to be followed, as well as the other conditions addressed in the General Permit, Section VIII.C., Aquatic Pesticide Use Requirements, Aquatic Pesticides Application Plan (APAP).

The use of aquatic herbicides within Railroad Marsh is necessary to control the growth of invasive vegetative growth, such as brush, willows, cattails, and tule. Cattails specifically have become a nuisance to the marsh and are impacting its beneficial uses, including viewing access for the public and flood control, and hampering aquatic habitat. This APAP, per the General Permit requirements, provides an outline to reduce noxious weed populations to maintain aquatic habitat and recreational use of the marsh while minimizing adverse environmental impacts.

II. Description of the Water System and Outlet Structures

Railroad Marsh is a historic marsh located in the Town of Tiburon adjacent to and north of the Town Hall (1505 Tiburon Blvd), bounded by Mar West Street and Marsh Road. It is surrounded by developed areas, with condominiums and the Town Hall and Library to the south, homes and apartments to the east and west and a parking lot and tennis courts to the north.

Railroad Marsh was historically part of the Belvedere Lagoon, but was cut off from tidal action in the 1880’s, when it was diked off by the construction of the Northwestern Pacific Railroad, and converted from a saltwater marsh to a freshwater marsh.

By the 1980s, the Railroad Marsh habitat had become severely degraded and had shrunk to an open water area of 0.2 acres due to overgrowth of cattails, blackberries, broom, and other vegetation. The marsh was restored in the late 1980s by dredging the marsh, removing invasive vegetation, and restoring its flood control capacity.

Since that time, the Town has provided period maintenance, including dredging and cattail cutting, to maintain the integrity of the marsh, but cattail growth has outpaced maintenance

efforts. Currently, the cattails cover approximately 44% of the water surface, threatening other aquatic life and impairing visual access to the marsh.

Urban stormwater from a 200-acre watershed feeds the 3.5-acre marsh, where sediment removal occurs before the water discharges to the San Francisco Bay. During a hydrographic survey conducted in September 2013, it was found that the pond had depths of up to 8.7 feet. The water level was 2 inches below the spillway flowline elevation, which is 4.0 feet above Mean Sea Level (MSL).

The outlet weir is adjustable and allows raising of the outlet elevation to 5.0 feet MSL. The outlet structure drains through a culvert to Raccoon Strait on San Francisco Bay. The outlet structure is inspected on a quarterly basis by the Town's maintenance staff. The outlet weir will be inspected prior to pesticide application to confirm that the water level is below the level of the outlet weir.

III. Description of the Aquatic Herbicide Treatment Area

The aquatic herbicide treatment area extents are delineated in Appendix B. Aquatic herbicide application will be limited to the southern and western portions of the marsh, where invasive weed growth impacts viewing access and therefore the educational and aesthetic benefits of the marsh. Aquatic herbicides will be applied up to twice per year in the treatment areas identified. The northern and eastern portions of the marsh will be left undisturbed.

IV. Description of Types of Weeds to be Controlled

There are several noxious weed species within the marsh, including brush, willows, cattails, and tule. Of primary concern are cattails, and this is the weed that will be targeted for aquatic herbicide application. Current maintenance efforts have not been successful at controlling cattail growth, and currently, over 44% of the water surface is covered by cattails. Three primary strands of cattails coexist within the marsh: narrow-leaved cattail (*Typha angustifolia*), broad-leaved cattail (*Typha latifolia*), southern cattail (*Typha domingensis*), and hybrids. Tule (*Scirpus actutus*) is locally dense within the cattail strands.

V. Aquatic Herbicide and Surfactant Products and Application

Imazamox (*Clearcast*), a branched chain amino acid inhibitor, will be used as an aquatic herbicide. Imazamox was selected because it has high efficacy in the control of cattails, is approved for aquatic applications, is relatively safe for fish and other aquatic life, and is not included on the Federal District Court's 2006 injunction list.

Imazamox is not listed on the Environmental Protection Agency's (EPA) website as being subject to the Federal District Court's 2006 injunction, which limits or prevents the use of pesticides within habitats and buffer zones of the California red-legged frog. Other aquatic

pesticides were considered, including Glyphosate (*Aquamaster, Road, etc.*) and Imazypyr (*Arsenal, Chopper, Assault*), but as these pesticides are subject to the injunction, it was determined that their use was not appropriate for this project. A summary of the injunction and the pesticides it is applicable to is provided in Appendix H.

The breakdown products of Imazamox are nicotinic, dicarboxylic, and tricarboxylic acids. None of these products are herbicidal or suggest concern for aquatic organisms or human health. Dissipation studies in lakes indicate that Imazamox has a half-life ranging from 4-49 days, with an average of 17 days.

Imazamox will be applied in accordance with the manufacturer's label instructions for application and safety and spot-sprayed (via boat or backpack sprayer) over cattail leaves above the waterline. The imazamox will be used in conjunction with an approved spray surfactant (*e.g. methylated seed oil*) to improve application effectiveness. A nonylphenol surfactant will not be used. Application will take place in September and October. Aerial application will not be permitted. Imazamox will be applied at a rate of between 2 and 4 parts of product per acre (0.25 to 0.5 lb active ingredient/acre).

Aquatic herbicide will be used in conjunction with water level management and cutting. Prior to applying the aquatic herbicide, the water level will be lowered by pumping 1 to 3 feet below the spillway elevation to expose the cattail leaves and reduce or eliminate downstream discharge. The pump will be covered with a screen to prevent fish take. 2-3 weeks after the aquatic herbicide treatment, the tops of the cattails will be cut one foot below the waterline. This will reduce the accumulation of dead plant material within the marsh, which otherwise would have impacts on dissolved oxygen and algae growth over time. 30-45 days after cutting, regrowth areas will be treated. The proposed vegetation eradication program is provided in Appendix G.

VI. Examination of Alternatives

In 2001, a management plan was prepared outlining viable cattail control measures for Railroad Marsh (Appendix E). At the time, the use of aquatic herbicides was not considered a viable alternative due to the suspension of the State general permit pending a judicial hearing, and only mechanical removal methods were considered. The management plan included a provision stating that, "Seedlings can be cut below the waterline or sprayed using an approved herbicide once the permitting issues are resolved in the state courts." The management plan was reviewed and conditionally approved by the California Regional Water Quality Control Board on July 1st, 2003.

From 2003 to the present day, only mechanical methods have been used to control cattail growth. Recently, a study was undertaken, including a hydrographic survey, preliminary plans, and an estimate for a dredging project to remove cattail roots within Railroad Marsh. After concluding this study, it was determined that sedimentation was not the primary cause of the explosive

cattail growth, as the cattails had become established in very deep (7 feet max) water, and that dredging would be an undesirable alternative for the Town at this time. Several factors contributed to this conclusion, including the following:

- The pond is small, so the cost to mobilize a contractor for the project would account for a significant portion of the dredging cost.
- There was a concern that because the marsh accepts urban runoff, the sediment would contain contaminants of concern, such as heavy metals, and would require special handling and off-haul.
- Dredging within the pond would cause turbidity and habitat disturbance.
- Approximately 30% of the area would need to be dredged by barge due to lack of shore access, at almost twice the cost of shore-based dredging.

Management options considered are as follows:

No action

The goal of this Aquatic Pesticide Application Plan is to minimize physical disturbance of the pond while maintaining the health of the marsh, maximizing native plant and animal species diversity, and maintaining the marsh as an educational resource. At this time, these goals cannot be met without the control of the explosive cattail growth within the marsh. After the conclusion of this maintenance plan, maintenance efforts will be reassessed, and it is possible that herbicide use can be eliminated or scaled back as cattail growth subsides.

Prevention

Dredging can be used to prevent future cattail growth, but the cattails of Railroad Marsh have become established in very deep water, so dredging was not found to be appropriate for this project, as discussed above.

Biological Control Agents

Previous efforts have included planting a vegetative buffer along the waterline after cattail removal to preserve clear areas and provide wildlife cover. Plantings included soft rush (*Juncus effuses*) and coyote brush (*Baccharis pilularis*). Since these plantings have become established as intended, no additional planting is anticipated at this time.

Cultural Control

Cultural methods of cattail control were not found to be applicable to this project.

Mechanical and Pesticide Control

This maintenance measure is used currently, and will continue to be used to control cattail growth. Currently, the cattails are cut 6 inches below the waterline, which will be increased to 12

inches below the waterline. It is expected that cutting efforts will be reduced over time as cattail growth subsides.

The decision to incorporate the use an aquatic herbicide is based on the findings of the past 14 years of maintenance efforts. Mechanical methods used in isolation have found to be ultimately ineffective, resulting in increased cattail growth in the pond. Aquatic herbicide use in isolation has the potential to result in the accumulation of dead plant material at the bottom of the marsh, resulting in reduced levels of dissolved oxygen. By using these two methods in sequence, the Town may be able to scale back or eliminate future maintenance efforts.

A summary of the alternatives considered is provided in Table 1. Both mechanical and pesticide control will be used as part of the current maintenance effort.

Table 1: Decision Matrix of Alternatives

Alternative Considered	<i>Effectiveness</i>	<i>Cost</i>	<i>Intrusiveness</i>	<i>Impacts to Water Quality</i>	<i>Maintenance of Native Plant and Animal Diversity</i>	<i>Included in Past Maintenance Efforts</i>	<i>Included in Current Maintenance Efforts</i>
No Action	NONE	LOW	NONE	NONE	LOW	YES	NO
Mechanical Control	MEDIUM	HIGH	HIGH	LOW	MEDIUM	YES	YES
Biological Control	LOW	MEDIUM	LOW	LOW	HIGH	YES	NO
Pesticide Control (Imazamox)	HIGH	LOW	LOW	MEDIUM	MEDIUM	NO	YES

Least Intrusive Method of Aquatic Herbicide Application

Prior to the application of aquatic herbicide, the Town will perform a visual inspection of the marsh to determine whether cattails are present and exceed desired levels in the areas to be treated. The aquatic herbicide will be applied as discussed in Section V and Appendix G of this Aquatic Pesticide Application Plan. Best management practices will be used to make pesticide application as safe and least intrusive as possible.

VII. Monitoring and Sampling

Monitoring will be conducted in accordance with the requirements outlined in Attachment C, Monitoring and Reporting Program, of the General Permit.

The General Permit requires discharges to comply with the Monitoring and Reporting Program (MRP). The goals of the MRP are as follows:

1. Identify and characterize aquatic herbicide applications projects conducted by the Discharger
2. Determine compliance with the receiving water limitations and other requirements specified in this General Permit
3. Measure and improve the effectiveness of the APAP
4. Support the development, implementation, and effectiveness of BMPs
5. Assess the chemical, physical, and biological impacts on receiving waters resulting from aquatic herbicide applications
6. Assess the overall health and evaluate long-term trends in receiving water quality
7. Demonstrate that the water quality of the receiving waters following completion of weed management projects are equivalent to pre-application conditions
8. Ensure that projects that are monitored are representative of all aquatic herbicide treatments and application methods used by the Discharger

Background, Event, and Post-Event Monitoring samples shall be collected in accordance with Section II.B. of the General Permit. Water sampling shall be analyzed by a certified lab. Samples will be retrieved, stored, recorded, and shipped to a third party laboratory.

Monitoring procedures for visual, physical and chemical properties will be as follows:

Sample Type	Constituent/Parameter	Sample Method	Sample Type Requirement
Visual	<ol style="list-style-type: none"> 1. Monitoring area description 2. Appearance of waterway (sheen, color, clarity, etc.) 3. Weather conditions (fog, rain, wind, rain, etc.) 4. Inspection of outlet structure to ensure no leaks 	Visual Observation	Background, Event, and Post-Event Monitoring
Physical	<ol style="list-style-type: none"> 1. Temperature (F) 2. pH (F) 3. Turbidity (F) 4. Electrical Conductivity at 25° C (F) 	Grab (3 feet below water surface or mid-depth if the water depth is less than 3 feet)	Background, Event, and Post-Event Monitoring
Chemical	<ol style="list-style-type: none"> 1. Active Ingredient - Imazamox (L) 2. Dissolved Oxygen (F) 	Grab (3 feet below water surface or mid-depth if the water depth is less than 3 feet)	Background, Event, and Post-Event Monitoring

(L) – Laboratory Testing; (F) – Field Testing

The discharge of residual aquatic herbicides shall not cause or contribute to an exceedance of the following limitations in the receiving water:

Constituent/Parameter	Concentration (µg/L)	Basis
Toxicity	Aquatic herbicide applications shall not cause or contribute to toxicity in receiving water(s).	Regional Water Boards' Basin Plans

MCL: Maximum Contaminant Level

EPA: Environmental Protection Agency

The constituents that each sample must be analyzed for is shown below:

Analyte	EPA Method	Reporting Limit	Hold Time (days)	Container	Chemical Preservative
Temperature	N/A	N/A	N/A	N/A	N/A
Turbidity	180.1	0.00 NTU	2	100 mL HDPE	None
Electrical Conductivity	120.1	0 µS/cm	28	100 mL HDPE	None
*Imazamox	N/A	N/A	14	1L Amber Glass	None
pH	150.1 or 150.2	1-14	Immediately	100 mL HDPE	None
Dissolved Oxygen	360.1 or 360.2	0.0 mg/L	1	1L Amber Glass	None
Hardness	200.7	1.0 mg/L	1	250 mL HDPE	None

*Active ingredient. Chemical analysis is only required for the active ingredient used in treatment.

(L) – Laboratory Testing

(F) – Field Testing

Field Sampling

The following field sampling materials will be used:

1. New sampling bottles, one per sample with sample ID labels
2. Coolers sufficient to hold sample bottles, with ice or gel-packs
3. Plastic gloves
4. Subsurface grab sampler
5. Instruments for measuring water and air temperature, pH and depth
6. Field data sheets, site map, and clipboard
7. A clean boat

Procedures to Prevent Sample Contamination

- Sampling will be done upwind.

-
- Sampling will be done in a manner to prevent contact with application equipment, containers, vegetation, personal protective equipment, and treated water.
 - Sampling equipment to be used at multiple locations will be thoroughly cleaned with a non-phosphate cleaner, triple rinsed in uncontaminated water, and then rinsed once with the water being sampled prior to its first use at a new location.
 - Gloves will be changed between sampling sites.

VIII. Best Management Practices

These best management practices are based on procedures discussed in the Marin Municipal Water District Vegetation Management Plan and modified for this project.

General

1. Aquatic herbicides will be applied by an applicator licensed by the California Department of Pesticide Regulation.

Spill Prevention and Containment

1. No more than 20 gallons of concentrated herbicide shall be transported in a vehicle.
2. Concentrated herbicide shall be transported in a spillproof, sealed container above and beyond the product container.
3. Vehicles carrying more than 5 gallons of concentrated product in an opened container or backpack sprayer will not be permitted to cross over the water.
4. Dry areas will be set up for workers in areas where treatments might occur to avoid washoff of herbicide from applicator's shoes.
5. A spill response plan will be developed including a notification system for possible spill scenarios.
6. All mixing and loading shall be done in a manner to contain any spills that might occur during transfers and should not be done near a water body.
7. Spill cleanup materials shall be available in all vehicles used for herbicide applications.

Appropriate Rate of Application

1. Applications will be limited to twice per year.
2. The treatment area will be the minimum acreage necessary, and shall be limited to those areas delineated in Appendix B.
3. The minimum application rate necessary to accomplish the job shall be used.
4. The application rate shall be in accordance with the label instructions for the aquatic herbicide product.
5. Herbicide applications will only occur between September 1st and October 31st in a given calendar year. Herbicides will not be applied in rainy weather.
6. Herbicides shall only be applied to cattails.

Protection of Workers

1. Applicators shall wear personal protective equipment while applying aquatic herbicides, including gloves, protective footwear, goggles, and coveralls. An eyewash bottle and extra pairs of clean gloves, coveralls, soap, and water shall be available in each vehicle for washing if workers are exposed to chemicals.
2. Mixer-loaders shall wear gloves, rubber boots, goggles, coveralls, and a protective apron.
3. If workers accidentally spill herbicide on themselves, they shall be required to wash the affected area as soon as possible.
4. Applicators shall spray in a downward direction to prevent spray drift from above.

Protection of the General Public

1. All trailheads and other access points leading to the treatment area should be closed and posted prior to treatment in order to minimize the probability of contacting treated vegetation.
2. Treated areas shall be posted for two weeks after the application.
3. No applications shall be conducted on weekends to reduce the possibility of exposures to the general public.
4. No applications should be conducted when wind speeds exceed five miles per hour or in locations where prevailing winds might carry spray drift onto private property.

Protection of Terrestrial and Aquatic Wildlife

1. 24 hours prior to the removal/cutting work, a qualified biologist will conduct a survey for red-legged frogs and will instruct the work crew on the identification and biology of red-legged frogs. The biologist will be available should the work crew identify a red-legged frog while the work is taking place. If a red-legged frog is observed, all work will cease immediately until the biologist arrives and assess the situation to determine if the work can proceed, and determine if the US Fish and Wildlife Service should be contacted.
2. The treatment area is limited to the southerly and westerly portions of the marsh. The north and east sides of the marsh will be left in place to provide undisturbed habitat for aquatic wildlife.
3. Avoid spills and spray drift to water bodies.
4. Work will take place in September and October, outside of red-legged frog sensitive egg and tadpole life stages.

X. Reporting Program

Application Schedule

The Town of Tiburon will provide phone numbers and other specific contact information to all persons who request the application schedule, in conformance with Section VIII.A. of the General Permit.

Public Notice Requirements

At least 15 days prior to the first application of aquatic herbicide, the Town of Tiburon will notify affected public agencies and any downstream water users of any aquatic pesticide applications being planned, in conformance with Section VIII.B. of the General Permit.

Annual Reporting

The Town of Tiburon will maintain a file of sample locations, site chain of custody forms, and other information developed as part of this reporting program. These data will be used to compile and submit to the Regional Water Quality Control Board (RWQCB) annual Pesticide Use Reports. An annual report will be prepared and submitted to the Marin RWQCB by March 1st of the year following the reporting period. In years where no aquatic herbicides are used, a letter stating no applications occurred will be sent to the RWQCB in lieu of an annual report.

The annual report will contain the following information as described in Attachment C of the General Permit:

1. An executive summary discussing General Permit compliance or violation and the effectiveness of the APAP to reduce or prevent the discharge of pollutants associated with aquatic herbicide applications.
2. A summary of monitoring data, including the identification of water quality improvements or degradation, and recommendations for improvement to the APAP (including proposed BMPs) based on the monitoring results. All receiving water monitoring data shall be compared to applicable water quality standards.
3. Identification of BMPs currently in use and discussion of their effectiveness in meeting the requirements of the APAP and General Permit.
4. A discussion of BMP modifications addressing violation of the General Permit.
5. A map showing the location of the treatment area.
6. Types and amounts of aquatic herbicides used at each application event during each application.
7. Information on surface area and/or volume of treatment area and any other information used to calculate dosage, concentration, and quantity of each herbicide used.
8. Sampling results shall indicate the name of the sampling agency or organization, detailed sampling location information, detailed map or description of each sampling site,

collection date, name of constituent/parameter and its concentration detected, minimum levels, method detection limits for each constituent analysis, name or description of water body sampled, comparison with applicable water quality standards, and a description of analytical QA/QC plan.

9. Summary of aquatic herbicide application log.

APPENDIX C: Aquatic Pesticide Application Log Form

Aquatic Pesticide Application Log

General

Date: _____ Location: Railroad Marsh Start time: _____ Stop time: _____
Agency: Town of Tiburon Applicator: _____

Table with 2 columns: Application Details (Total Area Treated, Weather conditions, Treatment area description, etc.) and Pesticide Details (Target weed(s), Pesticide used, Surfactant used, etc.)

Visual Monitoring (check if present) Monitoring area description:
Floating/suspended matter Aquatic Life (describe below)
Discoloration
Visible film, sheen, or coating
Slime

Applicator's Certification

I _____ certify that the Aquatic Pesticide Application Plan (APAP) has been followed.
(print name)

Signature: _____ Date: _____

Post Treatment Efficacy & Impact Name: _____ Date: _____
Effectiveness of treatment: POOR FAIR GOOD
Impacts to Water Quality: NONE SOME (describe below) SIGNIFICANT (describe below)

Notes: _____