



DEPARTMENT OF WATER

CITY OF SYRACUSE, MAYOR BEN WALSH

July 6, 2020

Joseph Awald, PE
Commissioner

John Walsh
Deputy Commissioner

New York State Department of
Environmental Conservation
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, NY 12233-1750

New York State Department of
Environmental Conservation
Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

NYSDEC

JUL 28 2020

Division of
Environmental Permits

Re: City of Syracuse Department of Water
Application for SPDES Permit to
Discharge a Pesticide Labeled for Aquatic Use.

To whom it may concern:

Enclosed please find the City of Syracuse Department of Water's (the "City") Application for State Pollution Discharge Elimination System ("SPDES") Permit to Discharge a Pesticide Labeled for Aquatic Use (the "Application"). The City seeks approval to apply a product known as EarthTec within a portion of Skaneateles Lake (the "Lake"), as needed, to suppress the growth of cyanobacteria within the Lake, which serves as the City's potable water supply.

The following materials are enclosed to assist the NYSDEC with its review and processing of the Application:

- SPDES Permit application form and supporting materials
 - o Detailed maps (Section 4);
 - o EarthTec pesticide label (Section 6);
 - o a summary of the City's monitoring plan (Section 8);
 - o draft notice letter; and
- SEQRA full environmental assessment form, Part 1.

Department Of Water
Skaneateles Lake
Watershed Protection
Program

20 W. Genesee Street
Skaneateles, NY 13152

Office 315 448-8366

Based on prior discussions with NYSDEC representatives, the City was advised that certification of notice to riparian owners pursuant to Section 9 of the Application was not required at this time. Instead, the City was requested to provide only the enclosed draft notice letter for review, with the understanding that if the Application

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Topic:

7 July 2020

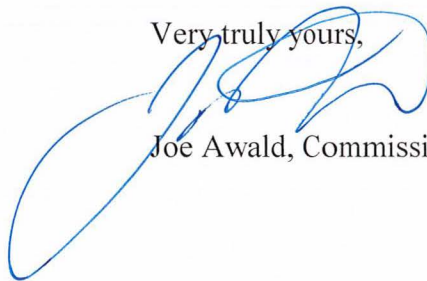
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is approved and the application of EarthTec is planned, appropriate notice will be coordinated with NYSDEC at that time.

Additionally, in accordance with the requirements of the State Environmental Quality Review Act ("SEQRA"), the City wishes to assume the role of lead agency concerning the environmental review concerning the Application. We have enclosed a lead agency consent request letter for your review and execution.


Thank you for your attention to this matter. Please contact me if you have any questions or require further information.

Very truly yours,



Joe Awald, Commissioner

Enclosure

	Department of Environmental Conservation	<p align="center"> New York State Department of Environmental Conservation Division of Water – Bureau of Water Permits Application for State Pollution Discharge Elimination System (SPDES) Permit to Discharge a Pesticide Labeled for Aquatic Use </p>
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SUBMIT THE APPLICATION 3 MONTHS BEFORE THE PROPOSED TREATMENT
REFER TO THE ATTACHED APPLICATION INSTRUCTIONS

1. PERMIT APPLICANT INFORMATION			
Name of Permit			
Applicant/Association/Agency: <i>City of Syracuse Department of Water</i>			
Name of Authorized Person signing the Application: (if on behalf of an Association/Organization) <i>Rich Abbott</i>			
Mailing Address: <i>20 West Genesee Street</i>			
City:	<i>Skaneateles</i>	State:	<i>NY</i>
		Zip Code:	<i>13152</i>
Telephone Number:	<i>315 263-9254</i>	Email:	<i>rabbott@syrgov.net</i>
		Website:	<i>syrgov.net</i>
2. PESTICIDE APPLICATOR INFORMATION			
Name of Pesticide Business/Agency performing application (if applicable): <i>TBD</i>			
Business/ Agency Registration Number:	Telephone Number:	Contact:	
Business Mailing Address:			
City:		State:	Zip Code:
Email:	Website:		
Name of Certified Applicator(s) performing application:	<i>TBD</i>	Certified Applicator(s) Identification Number:	
Mailing Address: (if different than Business Address)			
City:	State:	Zip Code:	Telephone Number:

3. WATER BODY INFORMATION					
Name of water body: Skaneateles Lake			DEC water classification (e.g. Class A, Class B): A		
Address or location of water body: Finger Lakes Region					
County where water body is located: Onondaga, Cayuga & Cortland			Town where water body is located: Skaneateles, Spafford, Niles, Sempronius, Scott		
Are fish present?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Are fish stocked?	
				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If fish are present, see the Instructions for Section #3.					
Are there any regulated freshwater or tidal wetlands associated with the proposed treated waters?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Do application sites include lands under the control of the DEC?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
If Yes, please specify: Skaneateles Lake (see attached map)					
Total water body size in acres: 8,704		Average depth in feet: 145		Latitude: 42.86043° N, -76.36391° E	
Longitude: 42.86043° N, -76.36391° E					
Water body uses (Check all that apply):					
Swimming <input checked="" type="checkbox"/>	Irrigation <input checked="" type="checkbox"/>	Livestock watering <input type="checkbox"/>	Potable water uses <input checked="" type="checkbox"/>	Domestic water uses <input checked="" type="checkbox"/>	Fishing <input checked="" type="checkbox"/>
Other uses (list)					
4. A DETAILED MAP MUST BE INCLUDED WITH THIS APPLICATION					
<ul style="list-style-type: none"> The exact map scale size and average depths of the water body. The outline and average depths of the application site(s), with all streams/treated sites/catch basins clearly identified. Inlets and outlets to the water body. (if the applicant can't control the outflow, also include the downstream watershed map information for Attachment D - Downstream Modeling) Location of known designated bathing sites, livestock watering sites, water intakes, public lands contiguous to the water body, public boat launches and any other features relevant to the application. Wetlands contiguous to the water body. 					

5. WATER BODY APPLICATION INFORMATION	
Whole or Partial Water Body Application:	
Total number of application sites:	1
Surface acres of each application site:	568
Total application area in surface acres:	568
Average depth of each application site:	15 ft.
Total number of acre feet:	8520

6. PESTICIDE APPLICATION INFORMATION (A COMPLETE PESTICIDE LABEL MUST BE ATTACHED TO THE APPLICATION)	
Pesticide name:	EarthTec
Pesticide active ingredient:	Copper Sulfate Pentahydrate (CAS no. 7758-99-8)
% Active Ingredient:	19.8%
Pesticide EPA Registration Number:	64962-1
Formulation:	Copper Sulfate Pentahydrate 19.8%, Inert Ingredients 80.2%
Application rate: (e.g. gals/acre ft. or gals/surface acre)	0.16 gals/acft - 1.0 gals/acft
Dosage rate: (e.g. ppm, ppb)	.03 ppm Cu - .18 ppm Cu
Total number of applications: (including bump/split applications)	1 - 2
Approximate date(s) of application: (including bump/split applications)	July - September 2020
Amount of pesticide needed per application:	up to 3,408 gallons (@ 1.0 gals/acft & 6 ft. target depth)
Total amount of pesticide needed per calendar year:	up to 3,408 - 6,816 gallons / year
Target pest: (scientific and common name)	Cyanobacteria (Blue-green algae)
Method of application (e.g. sprayed on surface, bag dragged behind boat):	Subsurface Injection
If the proposed application involves an aircraft, indicate FAA Number(s):	
7. WATER USE RESTRICTIONS	
List all the applicable water use restrictions as stated on the label/SLN, in 6 NYCRR 327.6, or the applicable water quality standards.	
Swimming	No restrictions
Irrigation	No restrictions
Livestock watering	No restrictions
Potable water uses	No restrictions
Domestic water uses	No restrictions
Fishing	No restrictions
Other	<div> <div>Potential cyanobacteria toxins released</div> <div>No impact from cyanobacteria toxins released</div> <div>- The purpose of EarthTec treatments is to mitigate risks (e.g., cyanotoxins) associated with increasing cyanobacteria densities - EarthTec treatment will not be initiated unless microcystin is detected in the City of Syracuse raw water intake: (> 0.3 ug/L), indicating that microcystin is present from naturally occurring cyanobacteria.</div> </div>

Two main factors that have been shown to affect toxin production are light and temperature (Cyanobacterial toxins: microcystin-LR in Drinking-water (World Health Organization 2003)

Exposures to copper concentrations registered for use (i.e., 0.1 - 1.0 mg Cu L⁻¹ as Cutrine-Plus and Algimycin-PWF) did not influence microcystin-LR Tot degradation compared to untreated controls (Iwinski et al., 2017)

Microcystin concentrations in water are generally positively correlated with algal cell density (Chorus and Bartram, 2000; Zohary and Paris Madeira, 1990). Therefore allowing microcystin producing algae to grow unmanaged can result in increased total microcystin and consequently increased risk (Iwinski et al., 2015).

Cyanobacteria are often more sensitive to copper-based algicide exposures than non-target algae and aquatic animals (Calomeni et al., 2014; Geer et al., 2016), demonstrating a selective approach for mitigating risks from HABs in water resources.

Microcystin can be subject to biodegradation following algicide exposures, with half-lives on the order of days (Iwinski et al., 2017) providing a relatively rapid transformation pathway for decreases in microcystin concentration and potential risks (Kinley et al., 2017).

8. SUPPLEMENTAL DOCUMENTATION

Include information requested below with the application

1.	<p>Monitoring Plan – Pre and Post Application</p> <p>The procedures the applicant will follow prior to making the determination an application is needed, including:</p> <ol style="list-style-type: none">whether confirmation of conditions requiring treatment will be based on monitoring data (and if so, details of the monitoring plan, including how and when initiated, sampling frequency and locations, etc.)which metrics (qualitative and/or quantitative) are used to determine the need to treat (and the basis for the choice of that metric), including verification of cyanobacteria taxa, quantification of blooms, and toxins analyses;how treatment area will be delineated based on conditions at the time of proposed treatmentpost treatment monitoring (procedures/indicators) to evaluate potential public health or environmental risk and identify when regular lake/waterbody use is restored
2.	<p>Proposed public outreach efforts that will be followed before and after an application, including</p> <ol style="list-style-type: none">Shorefront property owners engagement, through development and submittal of an EAFRiparian notification of treatment, consistent with the requirements of the Bureau of Pest Management Application for a Permit to Use a Pesticide For the Control of an Aquatic Pest (form AQV(11/2016));Notification of any testing results indicating issues related to public or environmental health, including cyanotoxin levels

9. CERTIFICATION OF NOTIFICATION OF RIPARIAN OWNERS AND USERS


The applicant must complete and sign the Certification of Notification of Riparian Owners and Users below. A copy of the notification letter and a list of riparian owners/users to whom the notification letter was sent must accompany this application. Check all appropriate statements:

	All owners of real property abutting the body of water proposed to be treated pursuant to this application, a list of whom is attached to this application, have been notified by letter of the proposed pesticide permit. This list includes property owners abutting the outflow from this body of water, if the water is not to be held in the treated water body for the period of time during which use of water is restricted. Such letters were mailed or personally delivered on ____ / ____ / _____. A copy of the letter is attached.	
	A review of the appropriate real property tax records indicates that no person other than the applicant owns any real property abutting the water body proposed to be treated.	
	A person(s), not owning abutting real property, possesses vested legal right to use the water body proposed to be treated. All such persons, and the nature of their right to use of the water proposed to be treated is attached. Such letters were mailed or personally delivered on ____ / ____ / _____. A copy of the letter is attached.	
	To my knowledge, no person other than the applicant possesses any vested legal right to use the water body treated pursuant to this application.	
Name:	If Applicant is not an individual, include the title of signatory:	
Signature:		Date:

10. AFFIRMATION:

The applicant/applicator guarantees that they will employ the listed pesticides in conformance with all conditions of the permit and agrees to accept the following conditions as a prerequisite to the issuance of a permit: that the issuance of the permit is based on the accuracy of all statements presented by the applicant/applicator; that damage resulting from the inaccuracy of any computations, improper application of the pesticide, or legal responsibility for the representations made in obtaining approvals or releases, or the failure to obtain approvals or releases from the riparian owners/users likely to be affected is the sole responsibility of the applicant/applicator.

I hereby affirm under penalty of perjury that information on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class "A" misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature of Permit Applicant or Representative: 	Title Watershed Quality Coordinator	Date: 7/6/2020
Signature of Certified Applicator:	Title	Date:

11. NOTES

ENVIRONMENTAL HAZARDS Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize this hazard, do not treat more than 1/2 of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated area. Certain water conditions including low pH (<6.5), low dissolved organic carbon levels (3.0 mg/L or lower) and soft waters (i.e. alkalinity <50 mg/L) increases the potential acute toxicity to non-target aquatic organisms. The application rates on this label are appropriate for water with alkalinity greater than 50 mg/L. Do not use these application rates for water with less than 50 ppm alkalinity (e.g. soft or acid waters) because trout and other species of fish may be killed under such conditions.

The EarthTec treatment area includes a 750 ft wide section extending from near-shore to open water within the North Basin of Skaneateles Lake. The total treatment area is 568 acres. The width of the North Basin ranges from approximately 2,500 ft. to 5,900 ft. The surface area of Skaneateles Lake 8,704 acres. Since the treatment area is approximately 1/15th of the lake surface area, fish can move readily to untreated areas. Dissolved oxygen levels will also not be negatively effected due to the ratio indicated above (Skaneateles Lake volume is estimated at 412 billion gallons). Skaneateles Lake water quality parameters include; pH 7.92 - 8.42 (daily avg. Aug. & Sept 2018) and alkalinity (100 mg/L), significantly above water conditions indicated on the EarthTec label. Hypolimnetic DO concentrations were relatively constant throughout the 2017 season ranging from 12.4 mg/L in May to 10.7 mg/L in September Water Quality and Limnological Monitoring for the Skaneateles Lake: Field Year 2017, Upstate Freshwater Institute.

INSTRUCTIONS TO COMPLETE FORM SPDES Pesticide Indiv. App.

A State Pollutant Discharge Elimination System (SPDES) permit for a point source discharge of a pollutant to, in, or over the waters of the State of any New York State registered pesticide that is labeled for aquatic uses, including both biological and chemical pesticides that leave a residue, must be obtained in accordance with Section 402 of the Clean Water Act (CWA) for point source discharges to waters of the United States and the rules and regulations of the State of New York in Parts 750-1.4 of Title 6 New York Code of Rules and Regulations (6 NYCRR). The following numbered directions correspond to the numbered blocks on the "Application for a SPDES Permit to Discharge a Pesticide Labeled for Aquatic Use" form. Please read the instructions carefully and complete the application form accordingly.

Completed applications with all requested attachments must be submitted at least 3 months before the proposed pesticide application date to provide the DEC with sufficient time for application review. If all the information is not provided, or if the information is not correct, the application will be incomplete and returned to the applicant for correction. Application review may not begin until a signed, complete, original application has been received by the DEC. Additional copies may be needed as determined by DEC Regional offices.

It is the responsibility of the applicant to determine if any other permit is needed prior to making a pesticide application.

The applicant must notify the Regional DEC Pest Management staff 7-14 days prior to the actual pesticide application to the water body. For permits requiring water use restrictions, the Regional Pest Management staff must also be notified within 24 hours after the application (or the first business day following the application for Friday, weekend or holiday applications). In addition, the applicant must allow the Regional Pest Management staff access to the water body and the ability to observe the pesticide application. The applicant must also give notice of the proposed date to the appropriate Regional, State or County Department of Health 7-14 days prior to the application, where the water body or outflow waters serve as water supplies.

1. PERMIT APPLICANT INFORMATION

The name of the permit applicant proposing the application must be provided. The applicant is the person/entity:

- a. with control over the decision to perform pesticide applications authorized by the SPDES permit that results in a discharge to surface waters of the State; OR
- b. who performs the application of a pesticide authorized by the SPDES permit or who has day to day control of the application that results in a discharge to surface waters of the State.

If the application is being prepared for an organization, association or an agency, the applicant should be the organization/agency. If the entity is incorporated, please use the name registered with the NYS Division of Corporations. If the applicant is not an individual, please provide the name of the person authorized to submit the application for the organization. **NOTE:** *The individuals signing the application must be the individuals identified on the application form. The application must be signed by an authorized individual, such as a riparian owner, an authorized representative of a lake association, or an authorized agency employee.*

Check the appropriate block to identify whether the applicant is a riparian owner or lessee, or an organization, agency, or other entity.

2. PESTICIDE APPLICATOR INFORMATION

Please provide the certified applicator information as identified on the application. Attach a list of certified applicators, if necessary. If applicable, provide the name and address, registration number and website/e-mail information of the Pesticide Business/Agency conducting the pesticide application.

3. WATER BODY INFORMATION

If fish are present, list the related application requirements specified on the label and explain how you will comply with these requirements. Place the information in the Notes Section #11 of the permit application or attach documentation. Examples of these requirements, typically found in the Environmental Hazards portion of the pesticide label, include but are not limited to: determining water hardness, dissolved oxygen, pH, and/or alkalinity; and prohibitions when Koi or sensitive fish species are present.

Except in the Adirondack Park, where the Adirondack Park Agency (APA) administers the Freshwater Wetlands Act, under the ECL Article 24 Freshwater Wetlands Act and the ECL Article 25 Tidal Wetlands Act, the Division of Environmental Permits in DEC regulates activities, including pesticide applications, in freshwater and tidal wetlands, and in their adjacent areas. Contact the DEC Regional DEP staff or the APA if you have any questions about obtaining a wetlands permit.

The Environmental Resource Mapper, found at the Department website at: <http://www.dec.ny.gov/animals/38801.html>, is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern. Currently included on the maps are locations of:

- Freshwater wetlands regulated by the State of New York (outside the Adirondack Park). Contact the Adirondack Park Agency for wetlands within the Adirondack Park.
- New York's streams, rivers, lakes, and ponds;
- Water quality classifications.
- Animals and plants that are rare in New York, including those listed as Endangered or Threatened (generalized locations).
- Significant natural communities, such as rare or high-quality forests, wetlands, and other habitat types.

Indicate if any of the application sites include lands under the control of the DEC. Such applications of pesticides require authorization from the DEC Division having jurisdiction. The permit will not be valid for such waters unless signed by the Director of the Division (or designee) in the area provided for this authorization.

4. DETAILED MAP

A copy of relevant portion of the 7 ½' U.S.G.S. quadrangle map containing the water body or stream(s) proposed for application must be attached. In addition, an expanded scale drawing showing in detail, including but not limited to, the following features of the application sites (if necessary, more than one such drawing should be submitted).

- A detailed map of the water body, with outlines of the weed beds, and outlines of site(s) proposed for application, or a diagram of all streams/surface acreage/catch basins proposed to be treated. All sites to be treated must be clearly identified. Be sure to include map scale.
- Length of shoreline in proposed application site(s) in feet; or length of target stream(s) proposed for application in feet.
- Width of proposed application site(s) outward from the shore (in feet).
- Depth soundings in site(s) proposed for application and their location(s). Information must be sufficient to determine correct pesticide application dosage if calculation is based upon the volume of water to be treated.
- Inlet and outlet streams, and location of any outflow control devices.
- Names and locations of known public and private water supply intakes, livestock watering sites, bathing sites, public boat launches or public lands in vicinity of the application sites and on the outlet waters.
- Any NYSDEC regulated freshwater or tidal wetland.

5. WATER BODY APPLICATION INFORMATION

For this section, choose the type of application and provide totals for the entire proposed permitted project. More detailed information on individual application dates and application sites may be required on the map or for the next application section.

A. Whole or Partial Water Body Application – Separate the application sites when you are treating ½ the water body at a time even if you propose to treat the entire water body. Provide information for each application site, application date or dosage rate. Enter the totals for the entire proposed permitted project on the form but use the map or separate documentation to identify individual application sites, if necessary.

6. PESTICIDE APPLICATION INFORMATION

Provide the information for each separate pesticide product proposed for application. Only one pesticide product may be requested on each permit application. Each individual application site, date of application, including split and bump applications must be accounted for. Use separate documentation or the map if necessary.

Specify the proposed date(s) of application. These must be the dates contained in the notification notice sent to all riparian owners. If the proposed dates change for any reason, the riparian owner(s) must be re-notified of the date change.

7. WATER USE RESTRICTIONS

List all the water use restrictions as stated on the pesticide product label or accompanying Special Local Need (SLN) labeling.

Consult the DEC regulations in 6 NYCRR 327.6 for specific restrictions on Copper Sulfate, Diquat and 2,4,-D on our website at: <http://www.dec.ny.gov/regs/2491.html>.

Information on the DEC Water Quality Standards in 6 NYCRR 703 may be found on our website at: <http://www.dec.ny.gov/chemical/23853.html>

The New York State Department of Health (DOH) maximum contaminant levels (MCL) for public water supplies, including the 50 ppb unspecified organic contaminant (UOC) standard, may be found in Tables on the DOH website at: http://www.health.ny.gov/regulations/nycrr/title_10/part_5/subpart_5-1_tables.htm

8. SUPPLEMENTAL DOCUMENTATION

Complete the documentation/ Information requests as described in this section and submit documentation with Application.

For Riparian Owner/User Notification, you must follow the instruction as provided in the Bureau of Pest Management Application For a Permit To Use A Pesticide For The Control of An Aquatic Pest (Form AQV(11/2016), as noted below:

An example of a notification letter, which is specific to only aquatic vegetation control, is attached at the end of this instruction sheet (Attachment A). This suggested letter contains the minimum wording necessary to satisfy riparian owner/user notification. You may add additional information. Certification that these written notices were provided must be completed in Section 11 of the AQV, Certification of Notification of Riparian Owners and Users.

Riparian owners are persons who own property along the shore of the proposed application sites. The ownership of the riparian property surrounding or bordering the waterbody proposed for application must be established, and if there is to be outflow during the restriction period along any outlet, this ownership must also be established.

Riparian users are those users of a waterbody who have a vested right to the use of the waterbody. Examples of such a vested right include a person with deeded access to the waterbody for recreational or other purposes, or a person who has a vested right to withdrawal and use of water from the waterbody.

If there is more than one riparian owner, or if there are one or more vested riparian users, these riparian owners/users must be notified in writing of the application and their right to object.

If there will be outflow of treated waters through lands owned by parties other than the sole waterbody riparian owner, they too must be notified.

Riparian owner/user notification must include:

- The date of the notice.
- Name of Applicant/Association and a contact phone number.
- The purpose of the proposed aquatic pesticide application.
- The pesticide(s) to be used. A copy of the pesticide product label (or the label with only the application directions not relevant to the proposed application deleted) must accompany the letter. According to ECL 33-0905.5, this information may be provided in either a written, digital or electronic form which shall be determined by the recipients.

- The anticipated water use restrictions.
- The date(s) of the proposed application. If application dates change from those stated in the notice or if dates are uncertain, a contact person and phone number with hours of availability must be provided.
- The fact that they may object to the application, how to file an objection, the location of the DEC Regional Office and the contact person where they may register their disapproval of the proposed application.
- The period of time, no more than 21 calendar days, to respond to the DEC if they do not consent to the proposed application.
- A statement that lack of comment will be considered agreement to the application.

By conditions imposed in the permit, the applicant may also be responsible for the posting of notification signs along shorelines, public access points, bathing sites, and swimming sites for notice of fishing, swimming and other restrictions as a result of the pesticide application. In addition, applicants may be required to mark or buoy the sites to be treated prior to application.

9. CERTIFICATION OF NOTIFICATION OF RIPARIAN OWNERS AND USERS

Check the appropriate blocks, and have the authorized individual sign and date. In cases where regulations or label directions require that treated water not be used for a stated period of time, the applicant must submit proof with the application that the water use restrictions can be enforced. The enforcement may occur by either securing consent from riparian owners/users or demonstrating that riparian owners/users will not be significantly adversely impacted.

10. AFFIRMATION

The application must be signed by an authorized individual, such as a riparian owner, an authorized representative of a lake association, or an authorized agency employee. NOTE: The individual signing the application must be the authorized person identified on the application form. Also include the individual's title, if a representative of a lake association or employee of an agency, and the date of endorsement. The Certified Applicator who is actually associated with the pesticide application must sign the application.

MAIL THE COMPLETED APPLICATION AND ATTACHMENTS TO THE FOLLOWING:

1. New York State Department of Environmental Conservation
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, NY 12233-1750

Phone: (518) 408-5476
2. New York State Department of Environmental Conservation
Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

Phone: (518) 402-8111

Attachment A: Sample Riparian Owner/User - Notification/ Consent Letter

Date of Notice: _____

Dear Riparian Property Owner/User:

To control the excessive growth of the aquatic plant species _____ (indicate plant species or algae) in _____ (name of water body), the _____ (name of applicant) proposes to conduct an application of the aquatic herbicide(s) _____ (product name).

A copy of the aquatic herbicide label(s) has been attached to this notice.

We anticipate the application to occur on _____ (list all proposed dates) and will proceed only after _____ (applicant name) obtains a permit for the application from the DEC. Prior notification of the exact dates of application will be provided by _____ (posting of shoreline, mailing, door to door, etc.).

As an affected riparian owner/user, you have the right to consent or object to the restrictions of water use resulting from the proposed application. The water use restrictions associated with use of the above pesticides are checked below:

Swimming and bathing are prohibited for _____

Fishing and/or fish consumption is prohibited for _____

Livestock watering is prohibited for _____

Irrigation or spraying of agricultural crops is prohibited for _____

Use of potable water is prohibited for _____

Use of water for domestic purposes is prohibited for _____

Other _____ (Specify)

You have twenty-one (21) days to respond to this notice. If you would like to object to the proposed application(s), you must file a written document stating your objection to the proposed application. Your objection must demonstrate that your use of the water body will be significantly adversely affected.

If you do not respond to this notice, your lack of response will be considered to be consent to the proposed application. If you have any questions on the permitting process, please contact the DEC representative listed above.

Send your objections to the proposed pesticide application to the person listed below:

Name of Contact Person
NYS Department of Environmental Conservation (DEC)
Region _____
Address _____
Telephone Number _____

If you would like further information about the pesticide application, or information on the exact dates of the pesticide application, please contact the following person:

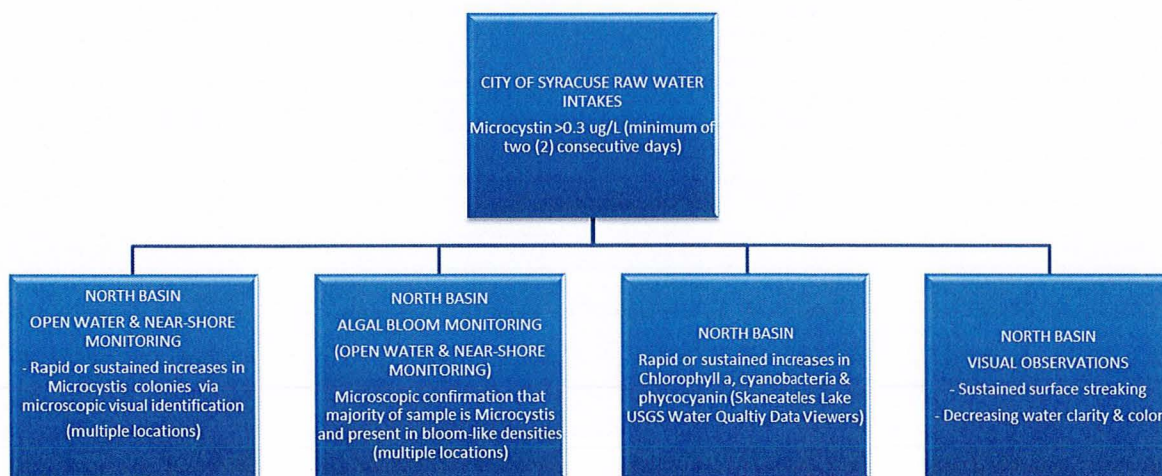
Name of Contact Person: _____
Telephone Number: _____
Hours Contact Person is Available: _____

Monitoring Plan – Pre & Post Application

- **(a & b) Guidelines for the Application of EarthTec**

The City of Syracuse Water Department (City) does not intend to utilize EarthTec as a reactionary measure to a lake-wide algal bloom. The objective is to decrease densities of microcystin producing cyanobacteria. Kinley et al. 2018 demonstrated the benefits of taking actions (utilizing copper-based algaecides) in early growth stages to minimize cyanobacteria densities and microcystin concentrations. Degradation of microcystin-LR occurred at environmentally relevant rates following copper algaecide exposures for mitigation of cyanobacteria blooms. Laboratory and field studies (Iwinski 2016; Iwinski et al. 2017) demonstrated copper algaecide exposures decreased rates of microcystin degradation only when copper concentrations were approx. 5 mg Cu L⁻¹, well in excess of legal application concentrations in the US of 1 mg Cu L⁻¹. In comparison, copper algaecide exposures of 0.1 through 2 mg Cu L⁻¹ resulted in similar degradation rates as untreated controls. Both studies provided evidence that the microcystin degradation is unlikely to be impacted by legal copper algaecide concentrations. The maximum concentration proposed for a Skaneateles Lake treatment is significantly below the lowest rate indicated above.

Triggers associated with initiating an EarthTec application by a City selected Commercial Pesticide Applicator (Category 5A –aquatic vegetation) is illustrated below. The primary factor in determining an application is two consecutive days of microcystin detection above 0.3 ug/L (top frame). Declining water quality conditions referenced within the bottom four frames (in advance, throughout, or proceeding the microcystin level threshold), will support initiating an application.

**Note:**

Pre-treatment monitoring sample quantities and locations will be subject to visual observations of water quality within the North Basin (near-shore and open water). Suspicious bloom reports will be investigated by Syracuse Water Dept. staff and samples collected (when warranted), for microscopic identification.

- **(c) Proposed treatment area will not change from Detailed Map (Section 4)**
The proposed treatment area will not exceed that depicted on the map and could be significantly less, depending on visual observations and monitoring results.

(d) Post treatment monitoring will commence within 24 hours of treatment and include microcystin sampling and microscopic visual identification within and adjacent to the treatment area. **Site specific areas include:**

- **Skaneateles Country Club bathing area**
- **Village of Skaneateles bathing area**
- **Village of Skaneateles Pier**
- **NYSDEC Boat Launch**

Microcystin samples will be collected daily at the above referenced sites until reported levels are <4 ug/L. In addition, continued scheduled monitoring and sampling will be performed in accordance with the Skaneateles Lake HAB Action Plan for Public Water Supplies (attached).

Proposed Public Outreach

2. (a) Shorefront Property Owners

The City of Syracuse Water Department ("City") has completed and submitted an EAF. Prior to an EarthTec application the NYSDOH, NYSDEC, SLA and elected officials within the five townships in the Watershed will be notified by City personnel. The City continues to fund contractual relationships with Cornell Cooperative Extension of Onondaga County (CCE of Onondaga County) and the Onondaga County Soil and Water Conservation District (Onondaga SWCD). CCE of Onondaga County maintains and updates an electronic listserv which includes 50 local municipal leaders, and watershed residents. Through electronic and verbal communications, mailings and door-to-door handouts, Natural Resources Team Educators, Onondaga SWCD and City staff will notify lakefront residents and property owners prior to an EarthTec application. Public outreach and education will also be a coordinated effort between the City, CCE of Onondaga County, Onondaga County SWCD and the City's selected aquatic pesticide applicator. CCE Onondaga will continue outreach to watershed residents, fire lane and lake associations, and property owners, to add to the existing listserv and expand the reach of the notification system.

2.(b) Riparian Notification of Treatment (attached find draft Letter of Notification)

2.(c) Notification of Testing Results

Post treatment testing results including microcystin will be posted on the Skaneateles Lake Watershed website and Onondaga County Department of Health website

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: EarthTec Application		
Project Location (describe, and attach a general location map): North Basin of Skaneateles Lake		
Brief Description of Proposed Action (include purpose or need): <p>Brief Description: Suppress cyanobacteria (blue-green algae) in Skaneateles Lake Purpose or Need: Treating the near-shore areas of Skaneateles Lake with EarthTec is designed to protect the City of Syracuse water supply (and public water supplies with Skaneateles Lake source). The primary objective is to keep cyanobacteria counts and microcystin collected by the City's water intakes as low as possible. The highest levels of microcystin are typically found in areas where there are dense accumulations of cyanobacteria biomass (particularly when dominated by Microcystis) along the shorelines. High levels of microcystin are typically found under these conditions, and the microcystin is almost entirely bound within the cells. It is possible that at least a portion of these cyanobacteria are recruited from the relatively shallow sediments within the proposed treatment area. Surface shoreline accumulations are transported about the lake when the wind shifts, and drawn into the water intakes. Near shore treatments are designed to minimize the amount of cell bound microcystin from moving around the lake (and over the City's water intakes) and to control blooms in their early stages, preventing large basin wide blooms from occurring.</p>		
Name of Applicant/Sponsor: City of Syracuse Department of Water		Telephone: 315 448-8366
		E-Mail: rabbott@syr.gov.net
Address: 20 West Genesee Street		
City/PO: Skaneateles	State: NY	Zip Code: 13152
Project Contact (if not same as sponsor; give name and title/role): Rich Abbott		Telephone: 315 263-9254
		E-Mail: rabbott@syr.gov.net
Address: 20 West Genesee Street		
City/PO: Skaneateles	State: NY	Zip Code: 13152
Property Owner (if not same as sponsor): New York State		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Planning Board or Commission		
c. City, Town or <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	New York State Department of Environmental Conservation - SPDES Permit	March 11, 2020
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, identify the plan(s): <u>Skaneateles Lake Watershed Watershed Rules & Regulations (10 CRR-NY 131.1 NY-CRR)</u> _____ _____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, identify the plan(s): _____ _____ _____	

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? <u>The proposed action will be limited entirely to a portion of Skaneateles Lake, which is regulated by NYS</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Is the use permitted or allowed by a special or conditional use permit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site? _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C.4. Existing community services.	
a. In what school district is the project site located? <u>Skaneateles School District</u>	
b. What police or other public protection forces serve the project site? <u>Skaneateles Police Department, Onondaga County Sherriff's Department</u>	
c. Which fire protection and emergency medical services serve the project site? <u>Skaneateles Fire Department, Skaneateles Ambulance Volunteer Emergency Services (SAVES)</u>	
d. What parks serve the project site? <u>Thayer Park & Cliff Park (Village of Skaneateles)</u>	

D. Project Details

D.1. Proposed and Potential Development	
a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? <u>Municipal Drinking Water</u>	
b. a. Total acreage of the site of the proposed action?	<u>568</u> acres
b. b. Total acreage to be physically disturbed?	<u>0</u> acres
b. c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?	<u>0</u> acres
c. Is the proposed action an expansion of an existing project or use? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____	
d. Is the proposed action a subdivision, or does it include a subdivision? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) _____	
ii. Is a cluster/conservation layout proposed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
iii. Number of lots proposed? _____	
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____	
e. Will the proposed action be constructed in multiple phases? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
i. If No, anticipated period of construction: <u>N/A</u> months	
ii. If Yes:	
• Total number of phases anticipated _____	
• Anticipated commencement date of phase 1 (including demolition) _____ month _____ year	
• Anticipated completion date of final phase _____ month _____ year	
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____ _____ _____	

f. Does the project include new residential uses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If Yes, show numbers of units proposed.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes,	
i. Total number of structures _____	
ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length	
iii. Approximate extent of building space to be heated or cooled: _____ square feet	

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes,	
i. Purpose of the impoundment: _____	
ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____	
iii. If other than water, identify the type of impounded/contained liquids and their source. _____	
iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres	
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length	
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)	
If Yes:	
i. What is the purpose of the excavation or dredging? _____	
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?	
<ul style="list-style-type: none"> • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ 	
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____	
iv. Will there be onsite dewatering or processing of excavated materials? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, describe. _____	
v. What is the total area to be dredged or excavated? _____ acres	
vi. What is the maximum area to be worked at any one time? _____ acres	
vii. What would be the maximum depth of excavation or dredging? _____ feet	
viii. Will the excavation require blasting? <input type="checkbox"/> Yes <input type="checkbox"/> No	
ix. Summarize site reclamation goals and plan: _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
 If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
 If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☒ No
 If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
 If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
 If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐ Yes ☒ No
 If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☒ No
 If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

<ul style="list-style-type: none"> Do existing sewer lines serve the project site? Will a line extension within an existing district be necessary to serve the project? <p>If Yes:</p> <ul style="list-style-type: none"> Describe extensions or capacity expansions proposed to serve this project: _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <ul style="list-style-type: none"> Applicant/sponsor for new district: _____ Date application submitted or anticipated: _____ What is the receiving water for the wastewater discharge? _____ 	
v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans): _____ _____	
vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____ _____ _____	
e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <ul style="list-style-type: none"> i. How much impervious surface will the project create in relation to total size of project parcel? _____ Square feet or _____ acres (impervious surface) _____ Square feet or _____ acres (parcel size) ii. Describe types of new point sources. _____ iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____ _____ <ul style="list-style-type: none"> If to surface waters, identify receiving water bodies or wetlands: _____ Will stormwater runoff flow to adjacent properties? <input type="checkbox"/> Yes <input type="checkbox"/> No 	
iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? <input type="checkbox"/> Yes <input type="checkbox"/> No	
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, identify: <ul style="list-style-type: none"> i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____ ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____ iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____ 	
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <ul style="list-style-type: none"> i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) <input type="checkbox"/> Yes <input type="checkbox"/> No ii. In addition to emissions as calculated in the application, the project will generate: <ul style="list-style-type: none"> _____ Tons/year (short tons) of Carbon Dioxide (CO₂) _____ Tons/year (short tons) of Nitrous Oxide (N₂O) _____ Tons/year (short tons) of Perfluorocarbons (PFCs) _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 	

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐ Yes ☒ No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☒ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐ Yes ☒ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend
☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐ Yes ☐ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐ Yes ☐ No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☐ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐ Yes ☒ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐ Yes ☐ No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
--	---

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>EarthTec (algaecide) EPA Reg. No. 64962-1</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ 	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☒ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☒ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

- ☐ Urban ☐ Industrial ☒ Commercial ☒ Residential (suburban) ☒ Rural (non-farm)
- ☐ Forest ☒ Agriculture ☒ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Coverture	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)	568	568	0
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☒ Yes ☐ No
i. If Yes: explain: Watercraft, fishing & swimming

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐ Yes ☒ No
If Yes,
i. Identify Facilities: _____

e. Does the project site contain an existing dam? ☒ Yes ☐ No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ 22 feet
• Dam length: _____ 160 feet
• Surface area: _____ .29 acres
• Volume impounded: _____ 412 Billion gallons OR acre-feet
ii. Dam's existing hazard classification: Class C
iii. Provide date and summarize results of last inspection:
May 16, 2019 Crest – repairs made to surface cracking, Upstream Slope – All observations are good, Downstream Slope – All observations are good, Outlet Works – Trash racks and erosion along dam toe need to be monitored

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☒ No
If Yes:
i. Has the facility been formally closed? ☐ Yes ☐ No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____
iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☒ No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☒ Yes ☐ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☒ Yes ☐ No
☒ Yes – Spills Incidents database Provide DEC ID number(s): 1806180
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
☐ Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☒ No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<ul style="list-style-type: none"> • If yes, DEC site ID number: _____ • Describe the type of institutional control (e.g., deed restriction or easement): _____ • Describe any use limitations: _____ • Describe any engineering controls: _____ • Will the project affect the institutional or engineering controls in place? <input type="checkbox"/> Yes <input type="checkbox"/> No • Explain: _____ 	
E.2. Natural Resources On or Near Project Site	
a. What is the average depth to bedrock on the project site? _____ N/A feet	
b. Are there bedrock outcroppings on the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %	
c. Predominant soil type(s) present on project site: <div style="display: flex; justify-content: space-between;"> lake bottom sediments 100 % </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> _____ _____ % </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> _____ _____ % </div>	
d. What is the average depth to the water table on the project site? Average: _____ N/A feet	
e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ N/A % of site <input type="checkbox"/> Moderately Well Drained: _____ N/A % of site <input type="checkbox"/> Poorly Drained: _____ N/A % of site	
f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ N/A % of site <input type="checkbox"/> 10-15%: _____ N/A % of site <input type="checkbox"/> 15% or greater: _____ N/A % of site	
g. Are there any unique geologic features on the project site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, describe: <u>Skaneateles Lake - North</u>	
h. Surface water features.	
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
ii. Do any wetlands or other waterbodies adjoin the project site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes to either i or ii, continue. If No, skip to E.2.i.	
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:	
<ul style="list-style-type: none"> • Streams: Name <u>896-2, 896-3, 896-1.1</u> Classification <u>AA, C(T)</u> • Lakes or Ponds: Name _____ Classification _____ • Wetlands: Name <u>Federal Waters, Federal Waters, Federal Waters,...</u> Approximate Size _____ • Wetland No. (if regulated by DEC) _____ 	
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, name of impaired water body/bodies and basis for listing as impaired: _____	
Name - Pollutants - Uses: <u>Skaneateles Creek and tribs – Priority Organics – Fish Consumption</u>	
i. Is the project site in a designated Floodway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
j. Is the project site in the 100-year Floodplain? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
k. Is the project site in the 500-year Floodplain? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes: Note: while part of the Town of Scott on the south end of the lake is over a sole source aquifer, the project area is not over or immediately adjoining that or any other aquifer	
i. Name of aquifer: <u>Principal Aquifer</u>	

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>Yellow Perch _____</p> <p>Smallmouth Bass _____</p> <p>Muskgrass (Chara sp.) _____</p>	
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): _____</p> <p>_____</p> <p>_____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p> <p>_____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p style="margin-left: 20px;">EarthTec (2EE - Reduced Rate For Algae) Details: Toxicity Statement: Aquatic Invertebrates, Fish</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☒ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☒ Historic Building or District

ii. Name: Eligible property: SHERWOOD INN, Eligible property: Syracuse Water Department Gate House, Eligible property: Main Reside...

iii. Brief description of attributes on which listing is based:
Land - based facilities

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☒ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☒ No

If Yes:

i. Describe possible resource(s):

ii. Basis for identification:

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☒ No

If Yes:

i. Identify resource:

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.):

iii. Distance between project and resource: miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☒ No

If Yes:

i. Identify the name of the river and its designation:

ii. Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

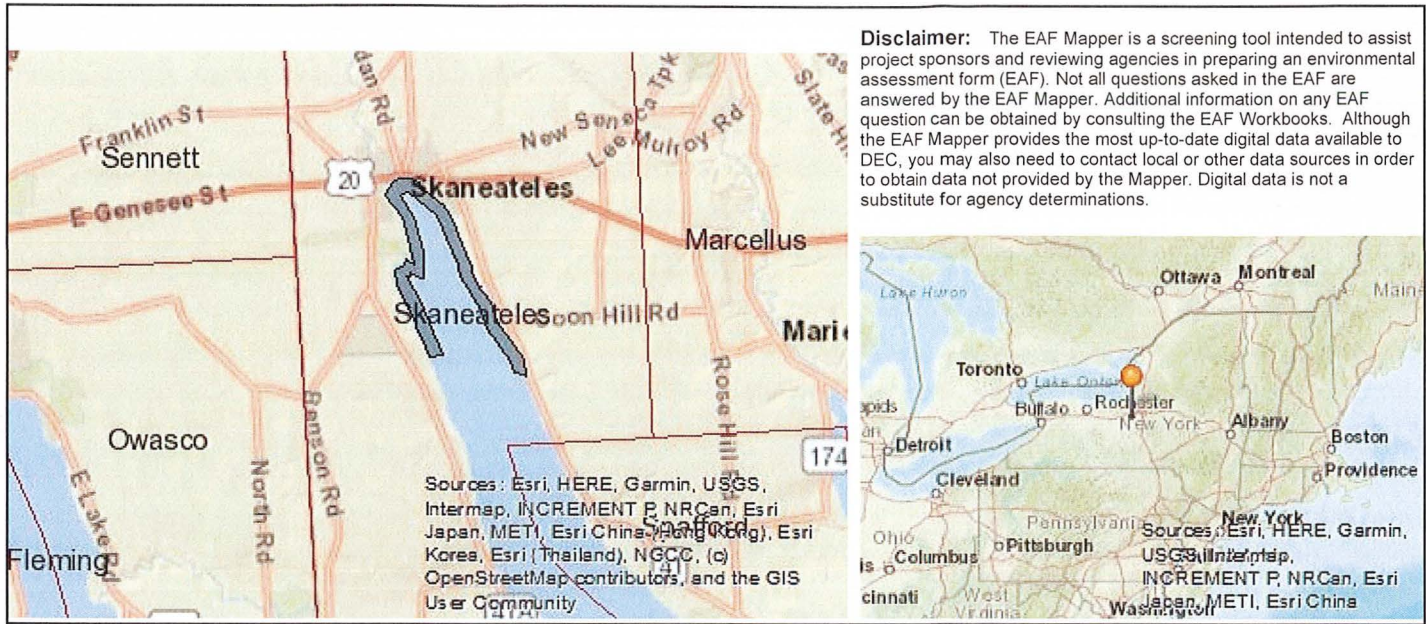
G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name City of Syracuse - Department of Water Date 3/18/2020

Signature  Title Watershed Quality Coordinator

PRINT FORM



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	Yes
E.2.g [Unique Geologic Features]	Skaneateles Lake - North
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	896-2, 896-3, 896-1.1
E.2.h.iv [Surface Water Features - Stream Classification]	AA, C(T)
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	Yes
E.2.h.v [Impaired Water Bodies - Name and Basis for Listing]	Name - Pollutants - Uses:Skaneateles Creek and tribs – Priority Organics – Fish Consumption

E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:SHERWOOD INN, Eligible property:Syracuse Water Department Gate House, Eligible property:Main Residence House, Eligible property:Weber Residence, 3 West Lake Street, Village of Skaneateles, Onondaga County, Eligible property:61 West Lake Street, Brook Farm, Smith, Reuel E., House, Skaneateles Historic District, Shepard Family Houses
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No



ACCEPTED

August 16, 2018

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product RegistrationClassified for
"RESTRICTED USE"
in New York State
under 6NYCRR Part 326

Doc id: 558617

Earth Science Laboratories, Inc.
113 S.E. 22nd St., Suite 1
Bentonville, Arkansas 72712Phone 800.257.9283
Fax 479.271.7693
www.earthsciencelabs.com**FIFRA Section 2(ee)
Recommendation****Product Bulletin
Technical Information****EarthTec – Use of Reduced Rates for Control
of Algae, Nonpublic Health Bacteria, and
Bacteria That Cause Odor Problems in the
State of New York****EPA Reg. Number: 64962-1**

This recommendation is made as permitted under FIFRA section 2(ee) and has not been submitted to or approved by the federal EPA.

Pesticide applicator certification and a permit from the New York State Department of Environmental Conservation may be required for sale, possession, or use. Contact the Pesticide Control Specialist at your NYSDEC regional office prior to the proposed application for specific conditions or exemptions.

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty on the EPA registered label are to be followed. Refer to the container label for additional instructions. Always read and follow label directions. Information contained in this Technical Information Bulletin is not intended to replace or amend any product labeling. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. For use in controlling algae and cyanobacteria at all aquatic application sites do not exceed a copper concentration in water of 1.0 ppm of metallic copper concentration (background + applied).

The user must have this recommendation in their possession at the time of use.

Directions for Use – Open Waters

Apply a dose no more than 3 parts per million EarthTec (i.e., 3 gallons of EarthTec per million gallons of water treated, equivalent to 1 gallon of EarthTec per acre-foot), yielding a concentration of 0.18 mg/L (ppm) as metallic copper. Supplemental applications are permissible as long as no more than a cumulative total of 0.18 mg/L as copper is applied in any given 14-day period.

Dose (ppm by volume)	gals/MG*	gals/ac-ft	Cu²⁺ (mg/L)
0.5	0.5	0.15	0.030
1	1	0.3	0.060
2	2	0.7	0.120
3	3	1.0	0.180

*MG = million gallons

Directions for Use – Infrastructure and Flowing Waters

For protection of pipelines and other infrastructure by addition to flowing waters, use a metering pump to deliver a dose equivalent to 0.5 to 3.0 uL/L of product, equivalent to 0.03 to 0.18 mg/L as copper.

EARTHTEC[®] ALGAECIDE/ BACTERICIDE*

For Impounded Waters, Lakes, Ponds, Reservoirs, Livestock Watering Systems, Potable Water Supplies*, Sedimentation Basins and Ornamental Water Features or Fountains; and Equipment/Structures that deliver water directly to publicly owned water treatment facilities to include pipes, intake structures, gatehouses, screens, pumping stations, weirs, and penstocks.

For Irrigation Conveyance Systems, Irrigation Reservoirs, Irrigation Canals and Ditches.

Bactericide* - Nonpublic Health Bacteria

Potable Water Supplies+ - Water Destined to Be Used as Drinking Water (this water must receive additional and separate potable water treatment)

ACTIVE INGREDIENT

Copper Sulfate Pentahydrate*(CAS No. 7758-99-8).....19.8%

OTHER INGREDIENTS.....80.2%

Total.....100.0%

*Metallic Copper5%

THIS PRODUCT WEIGHS 9.91 LB. PER GALLON - 1.188 kg/L.
AND CONTAINS 0.493 LBS ELEMENTAL COPPER PER GALLON

Manufactured by: Earth Science Laboratories, Inc.
113 SE 22nd Street, Suite 1
Bentonville, AR 72712
Phone: (800) 257-9283

EPA REGISTRATION NO. 64962-1

EPA ESTABLISHMENT NO. 64962-NE-001

NET CONTENTS:

☐ TANKER

BATCH NO.



Certified to
NSF/ANSI 60

KEEP OUT OF REACH OF CHILDREN WARNING • AVISO

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

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for 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 to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin

immediately with plenty of soap and water for 15 to 20 minutes. Call a poison control center or doctor for treatment.

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact INFOTRAC 1-800-535-5053 for emergency medical treatment.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON THE SIDE OR BACK PANEL.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

WARNING

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield or safety glasses), long sleeved shirt, long pants, shoes, socks and chemical-resistant gloves made of any waterproof material. Some materials that are chemical-resistant to this product are polyvinyl chloride, polyethylene and viton. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize this hazard, do not treat more than 1/2 of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated areas. Consult with the state or local agency with primary responsibility for regulating pesticides before applying to public waters to determine if a permit is required.

Certain water conditions including low pH (≤ 6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower) and "soft" waters (i.e. alkalinity less than 50 mg/L) increases the potential acute toxicity to non-target aquatic organisms. The application rates on this label are appropriate for water with alkalinity greater than 50 mg/L. Do not use these application rates for water with less than 50 ppm alkalinity (e.g., soft or acid waters) because trout and other species of fish may be killed under such conditions.

Consult your local state fish and game agency before applying this product to public waters. Permits may be required before treating such waters.

For applications in waters destined for use as drinking water, those waters must receive additional and separate potable water treatment. Do not apply more than 1.0 ppm as metallic copper in these waters (background + applied copper).

PERSONAL PROTECTIVE EQUIPMENT USER SAFETY REQUIREMENTS

Mixers, loaders, applicators and other handlers must wear the following:

- Long-sleeved shirt
- Chemical-resistant gloves made of any waterproof material (Chemical Resistance Category A)
- Long pants
- Protective eyewear
- Shoes plus socks

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

USER SAFETY RECOMMENDATIONS

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

Always refer to the label on the product before using EarthTec or any other product.

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 requirement specific to your state and tribe, consult the agency responsible for pesticide regulation.

USE INFORMATION

EarthTec® is used to control algae and to suppress nonpublic health bacteria and bacteria that cause taste and odor problems in impounded waters, lakes, ponds, lagoons, wastewater lagoons, reservoirs, livestock watering systems, potable water supplies, sedimentation basins, ornamental water features or fountains, and equipment/structures that deliver water directly to publicly owned water treatment facilities to include pipes, intake structures, gatehouses, screens, pumping stations, weirs, and penstocks.

EarthTec® is used to control algae and to suppress nonpublic health bacteria and bacteria that cause taste and odor problems in irrigation conveyance systems, irrigation reservoirs, irrigation canals and ditches.

EarthTec® is an algacide/bactericide/molluscicide consisting of a soluble formulation of copper. EarthTec®'s proprietary formulation ensures that the active ingredient – metallic copper – is delivered in the form of the biologically available cupric ion, Cu⁺⁺.

Before treating bodies of water, consult NPDES permitting authorities. Do not exceed a free metallic copper concentration (background + applied copper) in treated water of 1.0 ppm (mg/L), equivalent to 16.7 mg/L of EarthTec®.

This product has diffusional properties that move the ions through the water according to physical conditions. The product will stay soluble in the water until the ions are taken up by the algae/bacteria (non-public health) or affected by physical properties.

The product may be applied throughout the year. Apply when algae first appear. Apply based on the volume of water to be treated. The dose rates are variable and depend upon algae species, amount of algae present, water hardness, water temperature, turbidity and flows. Higher doses may be required for lower water temperatures, higher algae concentrations, and for hard waters. See Specific Directions for Use.

For control of planktonic algae, use a dose rate near the lower end of the labeled range. Dose near the higher end of the labeled range for rooted or stemmed species including Chara, Nitella, and filamentous algae. If there is uncertainty about the dosage, begin with the lower dosage and increase until algae control is achieved or until the maximum allowable level has been reached.

When treating flowing waters use a metering pump or similar means to apply a continuous dose so as to achieve a final dilution within the recommended range. See Specific Directions for Use.

USE IN CONTROL OF ALGAE, NONPUBLIC HEALTH BACTERIA, AND BACTERIA THAT CAUSE ODOR PROBLEMS

For algae control, apply in the late spring or early summer when algae first appear. The dosages are variable and depend upon algae species, water hardness, water temperature, amount of algae present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with temperature above 60 degrees F (15.6 degrees C). Higher dosages are required at lower water temperatures, higher algae concentrations and for hard waters. See Specific Directions for Use. EarthTec® is soluble and will quickly disperse. EarthTec® application for 3 acres or less may be poured directly into ponds, small lakes and reservoirs. EarthTec® application for 3 acres or more should be applied at several points in the ponds, lakes or reservoirs. Larger bodies of water can be treated with EarthTec® by dragging a feeder hose behind a boat across the body of water or dispensing via conventional spray equipment mounted to a boat, helicopter or airplane. EarthTec® will quickly diffuse throughout the water body in several hours; broad distribution of the product will speed dispersal and provide quicker control of algae. EarthTec® may be applied to irrigation systems by a drip system or feeder pump according to the flow volume. Use higher dosages for Chara, Nitella and filamentous algae, and lower dosages for planktonic algae. If there is uncertainty about the dosage begin with the lower dosage and increase until control is achieved or until the maximum allowable level has been reached. See Specific Directions for Use.

Treatment of algae can result in oxygen loss from the decomposition of dead algae. This loss can cause fish suffocation. If the algae cover more than 1/3 of the total water area, treat in sections. Treat 1/2 of the water area in a single operation and wait for 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated areas. In regions where ponds freeze in winter, treatment should be done 6 to 8 weeks before expected freeze to prevent masses of decaying algae under an ice cover. Before treating bodies of water, consult proper state authorities such as the fisheries commission or conservation department to obtain any necessary permits. For use in controlling algae and cyanobacteria at all aquatic application sites do not exceed a copper concentration in water of 1.0 ppm of metallic copper concentration (background + applied).

For example, if you wish to achieve 1.0 ppm of metallic copper, 1 gallon of EarthTec® added to 60,000 gallons of water is equal to 1.0 ppm metallic copper. In order to attain 1.0 ppm of metallic copper in the treated water, the amount of EarthTec® added to a water body is equal to the gallons of water being treated divided by 60,000 multiplied by 1 (e.g., see Gallons of EarthTec® and Water table below). Use volumetric measurement devices that are calibrated in accordance with manufacturer specifications.

Gallons of EarthTec® and Water		
Gallons EarthTec®	Gallons Water	Metallic Copper (ppm)
0.1 (0.4 quarts or 0.8 pints)	6,000	1.0
1/2 (1 quart)	15,000	1.0
1	60,000	1.0
1 1/2	100,000	1.0

Use formula for calculating water volume and flow rates. Calculate the volume of water (multiply the average depth by surface area). To calculate the gallons of water multiply the volume in cubic feet times 7.5. One cubic foot per second of flow equals 27,000 gallons/hour. One acre foot equals 326,000 gallons. See below for additional directions on methods of application to flowing water.

SPECIFIC DIRECTIONS FOR USE

To Control Algae, Nonpublic Health Bacteria, and Bacteria That Cause Odor Problems in Irrigation Reservoirs, Impounded Waters, Lakes, Ponds, Lagoons, Reservoirs, Livestock Watering Systems, Potable Water Supplies*, Sedimentation Basins and Ornamental Water Features or Fountains: For fish-bearing lakes, ponds, drinking water reservoirs, irrigation canals and other applications, apply at the rate of 1 quart of EarthTec® per 250,000 gallons of water, or 1 gallon of EarthTec® per 1,000,000 gallons of water for preventive treatment of algae and nonpublic health bacteria. This will yield a concentration of 0.06 ppm metallic copper. Increase as necessary to achieve control but do not exceed a resulting copper concentration of 1.0 mg/L of metallic copper (background + applied copper) in the treated water.

If algae are present, treat at the rate of 3 quarts of EarthTec® per 250,000 gallons of water, or 3 gallons of EarthTec® per 1,000,000 gallons of water. This will yield a concentration of 0.18 ppm metallic copper.

For applications without fish or for wastewater lagoons apply at the rate of up to 1 quart of EarthTec® per 15,000 gallons of water, or 1 gallon of EarthTec® per 60,000 gallons of water. This will yield a rate of 1.0 ppm metallic copper. Do not exceed a resulting concentration of 1.0 mg/L of metallic copper (background + applied copper) in the treated water.

Do not exceed 1 gallon of EarthTec® per 60,000 gallons of water (1.0 ppm metallic copper background + applied) under any circumstances for water destined for use as drinking water; EarthTec® may be poured into the water manually after calculating the volume of water to be treated and measuring the quantity EarthTec® necessary to attain a concentration of 0.06 ppm or by using an automated dispenser calibrated to release the required amount. For best results disperse EarthTec® evenly throughout the body of water on a sunny day when algae are near the surface. Do not apply copper sulfate to water with less than 50 ppm alkalinity. To Control and Suppress Algae, Nonpublic Health Bacteria and Bacteria that Cause Taste and Odor Problems in Potable Water Supplies*: Canals, Aqueducts, and equipment/structures that deliver the treated water directly to publicly owned water treatment facilities to include pipes, intake structures, gatehouses, screens, pumping stations, weirs, and penstocks:

For flowing waters use a metering pump to apply a continuous dose so as to achieve a final dilution not to exceed 1.0 mg/L as copper (16.7 ppm as EarthTec®). Preferably start with 1 to 4 ppm EarthTec® (0.06 to 0.24 mg/L metallic copper) and increase only as necessary. A continuous maintenance dose of 0.6 to 2.0 ppm EarthTec® (yielding a metallic copper concentration of 36 to 120 ppb, or micrograms per liter) can be used to prevent further growth. Start treatment at the first sign of algae problems and stop treatment when algae no longer pose a nuisance.

To Control Algae or Nonpublic Health Bacteria and Bacteria That Cause Odor Problems in Open Channel Irrigation Conveyance Systems, Ditches and Canals: To prevent algae growth using a static application method, apply 1 gallon of EarthTec® to 1,000,000 gallons of water to yield a rate of 0.06 ppm metallic copper in the water. If algae are present, apply 16.6 gallons of EarthTec® to 1,000,000 gallons of water to yield 1.0 ppm metallic copper. To prevent algae growth using continuous flow systems, a metered flow rate of 1 milliliter per minute is added to a pumping flow of 267 gallons per minute to yield a rate of 0.06 ppm metallic copper. If algae are present, do not exceed the total dose of 1 gallon of EarthTec® in 60,000 gallons of water (1.0 ppm metallic copper). See Example Calculation table below for continuous flow rates.

To Control Algae or Nonpublic Health Bacteria and Bacteria That Cause Odor Problems in Sprinkler, Drip or Other Types of Irrigation Equipment: Agitation is not required. Do not mix with basic substances. EarthTec® must be applied continuously for the duration of the water application. To prevent growth of algae, nonpublic health bacteria, and bacteria that cause odor problems, treat at a rate of 1 gallon EarthTec® per 60,000 gallons of water to 1 gallon EarthTec® per 1,000,000 gallons of water. This will yield a rate of 1.0 ppm to 0.06 ppm metallic copper (see Example Calculation table below). If algae are visible, start by cleaning the pipes or lines and then applying 1 gallon of EarthTec® in 60,000 gallons of water (1.0 ppm metallic copper). See Example Calculation table below for continuous flow rates. Once the lines are cleaned, use the preventive dose described above.

EXAMPLE CALCULATION				
IRRIGATION FLOW RATES				
(0.06 ppm Cu)				
Water Flow Rate gpm	Water Flow Rate cfm	Dosage Rate ppm Metallic Cu	EarthTec® fl oz/min	Feeder Pump Setting EarthTec® mL/min
3,000	400	0.06	0.4	11.3
6,000	800	0.06	0.8	22.6
9,000	1,200	0.06	1.1	34.0
12,000	1,600	0.06	1.5	45.3

IRRIGATION FLOW RATES				
(1.0 ppm Cu)				
Water Flow Rate gpm	Water Flow Rate cfm	Dosage Rate ppm Metallic Cu	EarthTec® fl oz/min	Feeder Pump Setting EarthTec® mL/min
3,000	400	1.0	6.4	188.7
6,000	800	1.0	12.8	377.5
9,000	1,200	1.0	19.1	566.2
12,000	1,600	1.0	25.5	755.0

APPLICATION AND HANDLING EQUIPMENT

Application, handling or storage equipment MUST consist of fiberglass, PVC, polypropylene, viton, corrosion resistant plastics or stainless steel. Never use mild steel, nylon, brass or copper around EarthTec®. Always rinse and clean equipment thoroughly each night with plenty of fresh, clean water.

PESTICIDE STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a safe place away from pets and keep out of the reach of children. Store away from excessive heat. EarthTec® will freeze. Always store EarthTec® above 32 degrees F (Do Not Freeze). Freezing may cause product separation.



DO NOT FREEZE

Always keep container closed. Keep away from galvanized pipe, and any nylon storage or handling equipment.

DISPOSAL

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess EarthTec® 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. In the event of spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

CONTAINER HANDLING

TANKER TRUCKS: Empty container retains vapor and product residue. Observe all precautions stated on this label until the container is cleaned, reconditioned or destroyed. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closures. Clean thoroughly before reuse for transportation of a material of different composition or before retiring this transport vehicle from service.

IMPORTANT

READ BEFORE USING

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Read the entire Directions for Use, Limited Warranty and Limitation of Remedies (including limitations on liability) before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

The Directions for Use of this product are believed to be adequate and must be followed carefully. However, 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 weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Earth Science Laboratories, Inc. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

To the extent consistent with applicable law, seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS OR MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions, or under conditions not foreseeable to the seller. To the extent consistent with applicable law, the seller shall not be liable for more than the cost of this product to the buyer and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it subject to the foregoing terms which may not be varied. Seller makes no warranty for product which has been frozen.

**Always refer to the label
on the product before using
EarthTec or any other product.**



DEPARTMENT OF WATER

CITY OF SYRACUSE, MAYOR BEN WALSH

Date: _____

LETTER OF NOTIFICATION

Re: Proposed Treatment For Harmful Algal Blooms – Skaneateles Lake

The City of Syracuse has received approval from NYSDEC to apply the algaecide EarthTec® (active ingredient; Copper Sulfate Pentahydrate) on _____, **2020** to control potentially harmful algae blooms in the north basin of the lake. The Program will be conducted by certified personnel with the firm SOLITUDE LAKE MANAGEMENT, Business Registration No.16505.

The roads and fire lanes along the lakeshore and public / private access points will be posted at the time of the treatment indicating applicable water use restrictions.

The following water use restrictions are currently applicable for your property for the duration of the treatment PLUS the timeframes indicated in the table below.

Water use restrictions are as follows:

Product	Swimming	Fish Consumption	Animal Consumption	Drinking, culinary or food processing purposes	Irrigation
EarthTec	No Restriction	No Restriction	No Restriction	No Restriction	No Restriction

Product	Impact From Cyanobacteria Toxins Released
EarthTec	No Impact

The product label is attached hereto and is also available for review on SOLitude Lake Management's website at <http://www.solitudelakemanagement.com/product-regulation-labels>.

If you wish further information about the proposed management program or need hard copies of the product label, please contact Rich Abbott (315- 263-9254) or SOLitude Lake Management (908-310-8775) between 9:00 am and 4:00 pm, Mon - Fri.

GROWTH. DIVERSITY. OPPORTUNITY FOR ALL.

