UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 5, 2019

Joanna Holcombe
Applied Biochemists, An Arch Chemicals, Inc. Business
1200 Bluegrass Lakes Parkway
Alpharette, GA 30004

Subject: Label Amendment – *Revising Storage and Disposal statement, adding optional marketing claims, correct typos and correct First Aid statement*
Product Name: Clearigate
EPA Registration Number: 8959-51
Application Date: 07/17/2019
Decision Number: 554988

Dear Ms. Holcombe:

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

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

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

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Stacey Grigsby by phone at 703.305.6440, or via email at grigsby.stacey@epa.gov.

Sincerely,

Stacey Grigsby

Stacey Grigsby
Regulatory Risk Manager, 34
Regulatory Management Branch II
Antimicrobials Division (7510P)

Enclosure

Note to reviewer:
[Items in brackets [AAA] are optional and may/may not be included on final label]
{Items in braces {AAA} are for information purposes and will not appear on final label}

ACCEPTED
11/05/2019
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 8959-51

CLEARIGATE

ACTIVE INGREDIENT:
COPPER AS ELEMENTAL.....3.825%
INERT INGREDIENTS 96.175%
TOTAL 100.000%
From mixed Copper Ethanolamines in an Emulsified Formulation
[Product Name] CONTAINS 0.31 LBS. OF COPPER PER GALLON

KEEP OUT OF REACH OF CHILDREN

DANGER [/] [PELIGRO]

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

{Note to reviewer: Although this product has a "Danger" signal word, as per the EPA label review manual "The Agency may permit reasonable variations in the placement of the First Aid statement as long as the reference statement, "See First Aid (or Statement of Practical Treatment) on (identify appropriate panel)" appears on the front panel." If the First Aid Statements are placed on the front panel of the final graphic label, the statement below will only refer to the Precautionary Statements:}
[See [side][back][right][left][inside][attached] [panel][label][booklet] for [Precautionary [and First Aid] Statements] [and] [Directions for Use].]
{or}
Read all Precautionary Statements [and] [Directions for Use] [on] [back][side][panel][inside booklet] before use.

EPA Reg. No. 8959-51
EPA Est. No. 42291-GA-1
Pat.# 5,407,899
Net Contents (insert container size here)

Sold By:
Applied Biochemists
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004
1-800-558-5106
www.appliedbiochemists.com

FIRST AID

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

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

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock as well as oxygen and measures to support breathing manually or mechanically may be needed. If persistent, convulsions may be controlled by the cautious intravenous injection of a short-acting barbiturate drug.

IN CASE OF EMERGENCY CALL 1-800-654-6911

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. CORROSIVE. Causes irreversible eye damage and skin damage. May be fatal if absorbed through skin. Harmful if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Wear protective eyewear, protective clothing and rubber gloves. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using toilet. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

Fish toxicity is dependent upon hardness of water. May be toxic to trout and other species of fish in soft water. Do not use in waters containing trout, koi, goldfish or other sensitive species if the carbonate hardness of the water is less than 50 ppm. Fish may be killed by dosage in excess of 0.5 ppm copper in flowing water or systems where total water volume treatments are made.

Avoid contact with drift to desirable plants or crops as injury may result. Clean out application equipment after each operation. Do not apply under conditions of high wind or wave action.

Treatment of dense weed growth and algae blooms in static ponds and lakes can result in oxygen loss from decomposition of dead vegetation. This loss can cause fish suffocation. Therefore, treat only 1/3 to ½ of the dense growth at a time and wait one to two weeks between treatments.

Some states may require permits for application of this product to public water. Check with local authorities.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE:
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read entire label. Use strictly in accordance with precautionary statements and directions and with applicable State and Federal Regulations:

STATIC WATER TREATMENT
SURFACE SPRAY / INJECTION APPLICATION
For effective control, proper chemical concentration contact should be maintained for a minimum of three hours. Application rates in the chart below are based upon static or minimum flow situations in lakes, ponds, reservoirs and inactive irrigation conveyance systems or drainage systems. Where significant inflow occurs (greater than 10% of total water volume in 24 hours), it is recommended that flow be stopped for 24 hours during and following treatment. If this is not possible, treat inflowing water in accordance with Flowing Water Treatment instructions.

Due to the potential toxicity to fish at dosages in excess of 0.5 ppm copper, the use of [Product Name] above this level is suggested only by experienced applicators. In areas where fish are net present or where some fish kill is not objectionable, total volume treatments can be made. In all other areas, treatments above 0.5 ppm copper should not exceed 1/3 to 1/2 of the entire water body, allowing one to two weeks between consecutive treatments.

Select dosage rate based upon species/type of plants being controlled. Choose a dilution which will allow relatively even application throughout the intended treatment area with the type of equipment being used. Avoid drift by using coarse spray droplets, applying close to the water surface and/or injecting solution below the water surface through submersed hoses for treatment of submerged growth.

Aquatic Vegetation Type or Species	**Dosage PPM Copper**	**Rates Gallons Per Acre-Foot**	**Dilution %Spray Solution V/V**	**Treatment Comments**
ALGAE				
Planktonic	0.1 -0.5	0.9 - 4.4	1.5%-5%	Apply lower dosage rates on light infestations. Use higher rates on heavy blooms and where algae masses are clumped and accumulated.
Filamentous	0.2-0.6	1.8 - 5.3	5%-10%	Apply lower dosage rates on early season, light infestations or treatment of regrowth. Apply higher rates on surface mats and coarse species such as *Pithorphora, Cladophora Lyngbya.*
Chara/Nitella	0.4-0.8	3.6 - 7.1	10%-15%	Apply lower dosage rates on new infestations or early season growth. Apply higher rates on older, established calcified plants. Apply as close to top of plant growth as possible.
SUBMERGED PLANTS				
Egeria densa (Brazilian Elodea)	0.6-1.0	5.4 - 8.7	10% -20%	Apply lower dose on early season, low density growth. Apply higher rates in thicker stands of plants. Product should be applied as close to the top of the plants as possible. Underwater injection is recommended when plants are more than one foot below water surface.
Elodea canadensis	0.8-1.0	7.1- 8.7	10%-20%	
Hydrilla verticillate	0.4-1.0	3.6 - 8.7	10%-20%	
Myriophyllum spp. (Water Milfoil)	0.8-1.0	7.1- 8.7	10%-20%	
Najas spp. (Naiad)	0.5-1.0	4.4 - 8.7	10%-20%	
Potamogeton spp. (Pondweeds)	0.5-1.0	4.4 - 8.7	10% - 20%	
FLOATING PLANTS		*Gallons per Surface Acre*		
Lemna spp. (Duckweed)		4.4 - 8.7	20%-25%	Apply lower rates to shallow (less than 1ft.) infestations. Use higher rates for large infestations in deeper water (1 foot or greater). Use a fine spray and wet plants thoroughly. Do not disturb with motor wake or paddles after treatment.
Eichornia crassipes (Water Hyacinth)		4.4 - 8.7	20%-25%	

FLOWING WATER TREATMENT
DRIP SYSTEM/METERING PUMP APPLICATION

Effective aquatic plant control in flowing water (canals, ditches, laterals, etc.) is dependent upon maintaining suitable contact time with sufficient chemical concentrations. Other factors to consider include: type of growth present, degree of infestation, water temperature and weather conditions during and following treatment. Fish may be killed at dosages in excess of 0.5 ppm copper in flowing water. Use dosages over 0.5 ppm only in areas where some fish kill is not objectionable or where fish have access to downstream avoidance of these concentration levels.

1. Prior to treatment, it is important to accurately determine water flow rates. In the absence of weirs, orifices or similar devices which provide accurate water flow measurements, volume of flow may be estimated via the following formula:

   Average Width (ft.) x Average Depth (ft.) x Velocity*(ft/sec) x 0.9 = Cubic Feet per Second (CFS)

   *Velocity is the time it takes a floating object to travel a given distance. Dividing the distance traveled (ft) by the time (seconds) will yield velocity (ft/sec). Repeat measurement at least 3 times at the intended application site and use the average of these measurements.

2. Calculate volume of ditch, canal, lateral or receiving pond in cubic feet based upon water levels at the time of treatment by using the following formula:

   Length (ft) x Average width (ft) x Average depth (ft) = Cubic Feet of Water

3. Calculate turnover time (the amount of time it takes for the water in the system to be replace by new water). Convert to hours using the following formula:

$$\frac{\text{Canal Volume (ft}^3\text{)}}{\text{Flow Rate (CFS)}} \div 3600 = \text{Turnover Time (hrs.)}$$

4. Select dosage rate from the chart below and calculate total [Product Name] requirements by using the formula following the chart.

AQUATIC VEGETATION TYPE	PPM COPPER	DOSAGE RATE QT. PER CFS/HOUR*
PLANKTONIC ALGAE	0.1 - 0.5	0.3-1.4
FILAMENTOUS ALGAE	0.2 – 0.6	0.6 - 1.7
CHARA/NITELLA	0.4 - 0.8	1.2 - 2.3
SUBMERGED WEEDS	0.5 - 1.0	1.4 - 2. 8

NOTE: Use higher dosage range in cooler water (60°F- 70°F), under conditions of heavy growth and/or on matured plant growth. Lower dosage ranges may be used on maintenance control treatments, young plants and/or under minimal growth conditions in warmer waters (>70°F).

[Product Name] Required (qts) = Dosage Rate (qt/CFS/hr) x Flow Rate (CFS) x Turnover Time (hrs)*
NOTE: If turnover time is less than 3 hrs, substitute 3 hrs. into this calculation.

5. For ditches, canals and laterals determine the number of drip/metering application sites required (based upon turnover time) by referring to the chart below:

TURNOVER TIME (HRS)	NUMBER OF DRIP/METERING SITES
Less than 4.5	1
4.6 - 7.5	2
7.6 - 10.5	3
10.6-13.5	4
13.6 - 16.5	5

Sewage treatment ponds and other sites where water is stored for a calculated retention time and are fed by a single input source will require a single dripper/metering system. Inflowing water should be treated at the appropriate dosage rate from the chart in #4 for the duration of the entire turnover time calculated in #3.

6. Calculate distance between drip/metering sites by using the following formula:

$$\frac{\textbf{Canal/Ditch/Lateral Length (ft)}}{\textbf{No. of Drip/Metering Sites}} = \textbf{Distance Between Drip/Metering Systems (ft)}$$

7. Calculate amount of [PRODUCT NAME] required per drip/metering site by using the following formula:

$$\frac{\textbf{Total [PRODUCT NAME] Required (qts)}}{\textbf{No. of Drip/Metering Sites}} = \textbf{[PRODUCT NAME] Required Per Site (qts.)}$$

8. Calculate drip/metering duration per site by using the following formula:

$$\frac{\textbf{[PRODUCT NAME] Required Per Site (qts)}}{\textbf{Dosage Rate (qt/CFS/hr) x Flow Rate (CFS)}} = \textbf{Drip Metering Duration (hrs) Per Site}$$

9. Calculate Drip/Metering Rate by using the following formula to convert to oz./min or ml/min.

Flow Rate (CFS) x Drip Rate (qt/CFS/hr) x 0.533* = Drip Rate (oz/min.)

*NOTE: 0.533 is a constant used to convert qt/hr to oz/min
METRIC CONVERSION: Drip Rate (oz/min) x 29.57 =Drip Rate (ml/min)

Calibrate drip system, metering pump or similar dosage device to establish output rate determined in Step No. 9. This can be done using a watch with a second hand and a calibrated measuring cup, graduated cylinder or similar vessel.
If possible, calibrate all drip/metering devices prior to beginning actual treatment. Turn them on as simultaneously as possible, beginning with the device furthest upstream.
Begin with only the amount of product required at each site or record your start-up time and shut down drip/metering systems after the drip/metering duration time period determined in Step No. 8.

Remove containers from application sites following treatment. Triple rinse application equipment. Dispose of empty containers in accordance with container disposal instructions on this label. Partially used containers should be resealed with original closures and stored in accordance with storage instructions on this label.

FOR OPTIMUM EFFECTIVENESS:
Apply [Product Name] early in the day under bright or sunny conditions when water temperatures are at least 60°F (15.5°C).
Apply when growth first begins to appear or create a nuisance.
Apply in a manner which will ensure even distribution of product within treatment area.
Repeat application, as needed, if regrowth begins to appear and seasonal control is desired.
Allow one to two weeks between consecutive treatments.

STORAGE & DISPOSAL:

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Keep container closed when not in use. Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not reuse or refill container. Do not contaminate feed, feedstuffs, or drinking water. Do not store or transport near feed or food. Store at temperatures above 32°F. Do not store near heat or flame.

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

[(For ≤5 gallon non-refillable containers)
CONTAINER DISPOSAL[:] Nonrefillable container. Do not reuse container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available or puncture and dispose of in approved landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Consult Federal, State or local authorities for approved alternative procedures.]

[(For >5 gallon non-refillable containers)
CONTAINER DISPOSAL[:] Nonrefillable container. Do not reuse container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ with water and recap. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning if available or puncture and dispose of in approved landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Consult Federal, State or local authorities for approved alternative procedures.]

[(For Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down))
CONTAINER DISPOSAL[:] Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

[(For refillable containers)
CONTAINER DISPOSAL[:] Refillable container. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat rinsing procedure two more times. Then offer for recycling or reconditioning if available or puncture and dispose of in approved landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Consult Federal, State or local authorities for approved alternative procedures.]

{BEGIN - OPTIONAL MARKETING CONTENT}

[Algaecide]/[Herbicide]/[Cyanobacteriocide]
Chelated copper algaecide and herbicide
[Clearigate] [(Brand)] [and] [the Applied Biochemists logo] [is a] [are] trademark[s] of Lonza or its affiliates.
Controls cyanobacteria (blue-green), green algae and diatoms
Developed by professional applicators to fight the toughest algae and weed problems
Does not add water use restrictions.
Eliminates tolerant algae
For Use In: [Crop and Non-crop Irrigation Conveyance Systems,] [Ditches, Canals, and Laterals,] [Potable Water Reservoirs,] [Lakes,] and [Farm,] [Fire,] [Fish,] [Golf Course,] [Industrial,] [Irrigation,] [Stormwater Detention,] [and] [Wastewater] [Ponds].
For product questions, call 1-800-558-5106
From mixed Copper Ethanolamines in an Emulsified Formulation
[Kills][controls][destroys] algae
Pat. No. 5,407,899
Tank mix [with other herbicides or algaecides] for superior control
Treats string algae [filamentous algae]
Kosher seal or symbol as approved

PRODUCT INFORMATION
[Product Name][This product] is a highly effective algaecide, herbicide and cyanobacteriocide [(blue-green algae)] for use in: [Crop and Non-crop Irrigation Conveyance Systems,] [Potable Water Reservoirs,] [Lakes,] and [Farm,] [Fire,] [Fish,] [Golf Course,] [Industrial,] [Irrigation,] [Stormwater Detention,] [and] [Wastewater] [Ponds.] This product controls coarse Filamentous Algae (thick cell-walled string algae), muscilaginous Planktonic Algae (colonial), Chara and aquatic vegetation species that have a sensitivity to copper in conjunction with a penetrant. Waters treated with this product may be used for animal consumption, further potable water treatment, or irrigating turf or crops after treatment.

GENERAL GUIDELINES:
[Product Name] is a chelated copper formulation containing an emulsified surfactant / penetrant for highly effective control of coarse (thick cell-walled) filamentous algae, muscilaginous (colonial) planktonic algae, Chara and a variety of emergent, floating and submerged aquatic plants. Vegetation controlled includes: Cladophora, Pithophora, Lyngbya, Microcystis, Hydrilla, pondweeds, water milfoil, naiad and other species having a sensitivity to copper absorption in conjunction with a penetrant.

WARRANTY DISCLAIMER
Neither the manufacturer nor the seller makes any warranty, expressed or implied concerning the use of this product in a manner that is not consistent with the use expressly set forth on the label. To the extent permitted by, and consistent with, applicable law, buyer assumes any risk of use of this product that is not consistent with label use instructions. Read and follow the label directions.

Warranty
To the extent consistent with applicable law neither the manufacturer nor the seller makes any warranty, expressed or implied concerning the use of this product other than indicated on the label.
To the extent consistent with applicable law buyer assumes risk of use of this material when such use is contrary to label instructions. Read and follow the label directions.

Applied Biochemists

{END - OPTIONAL MARKETING CONTENT}