

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MAR 20 2009

Ms. Kimberly Hensley
Product Registration
Environmental Solutions Group, LLC
Agent for SSI Corporation
1415 L Street, Suite 460
Sacramento, CA 95814-3964

SUBJECT:

Application for Pesticide Notification (PRN 98-10)

Request General Label Change (Comply with CA State Regulations)

EPA Reg. No. 65109-1

Application Dated February 17, 2009

### Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 02/17/09 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Owen F. Beeder of my staff at 703-308-8899.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader Registration Division (7505P)

Office of Pesticide Programs

| Pinese read instructions on r                                                                                                                                                                                           | everse before completing form.                                                               |                             | Fo                                  | om Approve                                                          | J. OMB No. 20                     | 70-0060                           | Print Form                                                           |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------|---------------------------------------------------------------------|-----------------------------------|-----------------------------------|----------------------------------------------------------------------|--|
| <b>\$EPA</b>                                                                                                                                                                                                            | United States Environmental Protection Agence Washington, DC 20460                           |                             |                                     | Registrat                                                           |                                   |                                   |                                                                      |  |
|                                                                                                                                                                                                                         | Applicati                                                                                    | on for F                    | esticide                            | - Section                                                           | n I                               |                                   | <u> </u>                                                             |  |
| 1. Company/Product Number<br>65109-1                                                                                                                                                                                    |                                                                                              |                             | 2. EPA Product Manager<br>Tony Kish |                                                                     |                                   |                                   | 3. Proposed Classification                                           |  |
| 4. Company/Product (Name)                                                                                                                                                                                               | Coperlate                                                                                    |                             | PM# J.J.                            |                                                                     |                                   |                                   | None Restricted                                                      |  |
| 5. Name and Address of App<br>SSI Corporation<br>210 S. Cedar<br>Julesburg, CO 80737<br>Check if this                                                                                                                   | olicant (Include ZIP Code)<br>is a new address                                               |                             | 6. Expedi<br>(b)(i), my p<br>to:    | ted Review<br>product is si                                         | milar or identi                   | cal in con                        | FIFRA Section 3(c)(3) nposition and labeling FIFICATION  AR 2 0 2009 |  |
|                                                                                                                                                                                                                         |                                                                                              | Sec                         | tion - II                           |                                                                     |                                   |                                   |                                                                      |  |
| Amendment - Explain Resubmission in resp  Notification - Explain                                                                                                                                                        | onse to Agency letter dated                                                                  | <del></del>                 | - 🗒 🐔                               | nal printed lat<br>gency letter d<br>de Too" Appl<br>ther - Explain | ication.                          | to                                |                                                                      |  |
| This is to notify EPA of so                                                                                                                                                                                             | me additional language that the ace of the table that was remov                              | e State of 0<br>ed when t   | CA, Dept. of<br>he label wa         |                                                                     |                                   |                                   |                                                                      |  |
|                                                                                                                                                                                                                         |                                                                                              | Seci                        | ion - III                           | <del> </del>                                                        |                                   |                                   |                                                                      |  |
| 1. Material This Product Will Be Packaged In:  Child-Resistant Packaging  Yes*  No  * Certification must be submitted  This Product Will Be Packaged In:  Unit Packaging  Yes  No  No  No  If "Yes" Unit Packaging wgt. |                                                                                              |                             | Soluble Pack<br>Yes<br>No           | No. per container                                                   |                                   |                                   |                                                                      |  |
| 3. Location of Net Contents  Label C                                                                                                                                                                                    | Information 4. Size(s) Recontainer                                                           | etail Contai                | ner ,                               | 5.                                                                  | Location of Label On Label        |                                   | ns<br>panying product                                                |  |
| 6. Manner in Which Label is                                                                                                                                                                                             | Affixed to Product Litho Paper Stend                                                         | graph<br>r glued<br>ciled   |                                     | Other _                                                             |                                   |                                   |                                                                      |  |
|                                                                                                                                                                                                                         |                                                                                              | Sect                        | ion - IV                            |                                                                     |                                   |                                   |                                                                      |  |
| 1. Contact Point (Complete                                                                                                                                                                                              | items directly below for identificati                                                        | on of indiv                 | dual to be co                       | ontacted, if n                                                      | ecessary, to pro                  | cess this                         | application.)                                                        |  |
| Name<br>Kim Hensley                                                                                                                                                                                                     |                                                                                              |                             | I Dogulaton, Coorialist             |                                                                     |                                   | Telephone No. (Include Area Code) |                                                                      |  |
| I certify that the state I acknowledge that an both under applicable                                                                                                                                                    | Certific<br>ments I have made on this form an<br>y knowingly false or misleading sta<br>law. | d all attach                | ments theret<br>y be punisha        | to are true, a                                                      | ccurate and con<br>r imprisonment | nplete.                           | 6. Date Application<br>Received (Stamped)                            |  |
| 2. Signature/                                                                                                                                                                                                           |                                                                                              | <b>3. Title</b><br>Regulato | atory Specialist                    |                                                                     |                                   | 0 0 0 0 0 0                       | 0000                                                                 |  |
| 4. Typed Name Kim Hensley                                                                                                                                                                                               | 0.                                                                                           | 5. Date                     | 2/12                                | /00                                                                 |                                   |                                   | 0000                                                                 |  |

# ENVIRONMENTAL SOLUTIONS GROUP, LLC

1415 L Street, Suite 460 Sacramento, California 95814-3964 Telephone (916) 443-2793 Facsimile (916) 443-3071

KIMBERLY HENSLEY
REGULATORY SPECIALIST
E-Mail: khensley@esgllc.net

# **Certification Statement**

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Kim Hensley

Regulatory Specialist

Date

# **COPERLAT**

# ALGAECIDE/BACTERICIDE\*

FOR LAKES, PONDS, RESERVOIRS, CANALS, LAGOONS, AND OTHER WATER SYSTEMS \*Non Public Health

9.9 Lbs Per Gallon 1.188 Kg/L

**ACTIVE INGREDIENTS** 

Copper Sulfate Pentahydrate\*\*...... 20% Inert Ingredients ...... 80% TOTAL......100%

\*\*Metallic Copper Equivalent ..... 5 %

CAS # 7758-99-8

Manufactured By:

SSI Corporation 210 S. Cedar Julesburg, CO 80737 970.474.0974

# **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 detaile). (If you do not understand this label, find someone to explain it to you in detail).

NOTIFICATION

## PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals Non-Flammable. Do Not Freeze.

MAR 2 0 2009

# **DANGER**

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled, or absorbed through skin. May cause allergic skin reactions. Avoid contact with skin. Wash thoroughly with soap and water after handling.

# **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 OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison

control center or doctor for treatment advice.

IF SWALLOWED:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow.

Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an

unconscious person.

IF INHALED:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably

by mouth to mouth, if possible. Call a poison control center or doctor for treatment advice.

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

EPA Reg. No. 65109-1

Version 021209

EPA Est. Nos 65109-CO-001

Net Contents: FIFTY-FIVE (55) U.S. GALLONS

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, Loaders, Applicators, and other handlers must wear the following:

- Long-sleeved shirt,
- · Long pants,
- Chemical resistant gloves, made of any waterproof material.
- Protective eyewear, and
- · Shoes plus socks.

Some materials that are chemical-resistant to this product are nitrile and polyvinyl chloride. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

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

#### **USER SAFETY RECOMMENDATIONS**

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

#### **ENVIRONMENTAL HAZARDS**

FISH AND AQUATIC ORGANISMS: 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 hazard, do not treat more than ½ of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. In regions where ponds freeze in winter, treatment should be done 6 to 8 weeks before expected freeze time to prevent masses of decaying algae under an ice cover. 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), increase potential acute toxicity to non-target aquatic organisms. Trout and other species of fish may be killed at application rates recommended on the label, especially in soft or acidic waters as described above. Do not contaminate water when disposing of equipment wash-waters or rinsate.

Endangered Species Restrictions: It is a violation of Federal laws to use any pesticide in a manner that results in the death of an endangered species or adverse modification of their habitat. The use of this product may pose a hazard to certain federally designated endangered species known to occur in specific areas of the following counties and their respective states: Solano (CA); Lawrence, Wayne, Hancock, Claiborne, Hawkins, Sullivan (TN); Lauderdale, Limestone, Madison (AL); Grayson, Smyth, Scott, Washington, Lee (VA). To protect listed species in California, contact your County Agricultural Commissioner or refer to the Department of Pesticide Regulation's PRESCRIBE Internet Database: <a href="http://www.cdpr.ca.gov/docs/endspec/prescint.htm">http://www.cdpr.ca.gov/docs/endspec/prescint.htm</a>

#### APPLICATION AND HANDLING EQUIPMENT

Application, handling or storage equipment MUST consist of either fiberglass, PVCs, polypropylenes, most plastics, or stainless steel. Never use mild steel, nylon, brass, aluminum or copper around, or to store or handle full strength COPERLATE. Always rinse equipment free and clean of COPERLATE each night with plenty of fresh clean water.

Always store **COPERLATE** above 32 degrees F. Freezing may cause product separation. Seller makes no warranty for the performance of product which has been frozen.

#### STORAGE AND DISPOSAL

Prohibited. 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. COPERLATE will freeze. Always keep container closed. Store COPERLATE in its original container only. Bulk COPERLATE shall be stored and handled in stainless steel, fiberglass, polypropylene, PVCs or plastic equipment. Keep away from galvanized pipe, brass, copper, and any nylon or aluminum storage handling equipment.

Pesticide Disposal: Excess COPERLATE should be disposed of through use. Do not contaminate lakes, rivers or streams as thic may cause fish kill. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, mixture or residue is a violation of Eederal 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 a spill, neutralize with linestons or baking soda before disposal. May deteriorate concrete. Do not re-use empty container.

Container disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse empty containers (of equivaler,t); then offer for recycling, if available or puncture and dispose of in a sanitary landfill or, if permitted by state and local authofity, cby-if-cineration-off-burned, stay out of smoke.

#### 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 or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE), restricted re-entry intervals, and notification to workers. Do not enter or allow entry into treated areas during restricted entry interval (REI) of 48 hours. PPE required for early entry into treated areas, that is permitted by the Worker Protection Standard, and that involves contact with anything that has been treated, such as soil or water, consists of coveralls, chemical resistant gloves made of any water-proof material, shoes plus socks, and protective eyewear.

#### **GENERAL INFORMATION**

COPERLATE is an innovative unique formulation used for the suppression of bacterial odors and toxic gases in sewage lagoons, feedlot run-off pits, animal confinement facilities and other ponds containing organic matter or algae/bacteria. COPERLATE may also be used to control algae and bacteria in irrigation reservoirs, ponds, and potable water supplies. In still waters, COPERLATE has a vertical dispersion rate of 20 feet per hour and a horizontal dispersion rate of 25 feet per hour. In flowing waters, dispersion is faster depending on turbulence and velocity of flow. Do not apply more than 1.0 ppm as metallic copper.

Note: Effectiveness of COPERLATE decreases as the alkalinity increases and is significantly reduced when the alkalinity exceeds approximately 150 ppm as CaCO3. As alkalinity increases, application rates towards the higher end of stated use ranges may be required.

Do not apply **COPERLATE** to water less than 40 ppm alkalinity without first doing a preliminary toxicity test on fish in the water. Perform this test in a separate container. **COPERLATE** may be very toxic to trout and other species in soft or acidic waters. This preliminary testing is necessary.

For potable water systems: if the impounded water is a source of potable water or for potable water systems or for livestock watering systems, do not exceed one gallon in 60,000 gallons under any circumstances (1 ppm metallic copper). Potable water sources treated with copper products may be used as drinking water only after proper additional potable water treatments. (Review General Algae Control Section of this label before proceeding).

#### If COPERLATE is to be sprayed:

- Do Not apply during temperature inversions;
- Apply only when wind velocity favors on-target deposition (approximately 3 to 10 mph)
- Do Not Apply if wind velocity exceeds 15 mph;
- · Use only medium or coarse spray nozzles in boat mounted booms, ground booms, aerial applications or hand sprayers.
- For boat mounted booms, booms should be mounted so nozzle tips are no more than 2 feet above the water's surface.
- For aerial applications (rice fields only), the spray should be released at the lowest height, consistent with pest control and flight safety.
- For aerial applications (rice fields only), the spray boom should be mounted on the aircraft as to minimize drift caused by wing-tip or rotor vortices. The minimum practical boom length should be used.

GENERAL ALGAE CONTROL: For algae control, apply in 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 temperatures above 60 degrees F (15.6 degrees C). Higher dosages are required at lower water temperatures, higher algae concentrations and hard waters. Effective control of most algae species can be obtained with copper levels between 0.2 – 1.0 ppm metallic copper. Application should be done by pouring or spraying COPERLATE DIRECTLY FROM THE CONTAINER INTO THE LAKES, PONDS, and RESERVOIRS OR IRRIGATION CANALS. Several application points speed up dispersal. In irrigation canals, the preferred application is via the Drip Irrigation and Injection instructions contained on this label. Static water requires less chemical for algae control than does flowing water. Use higher dosages to control chara, nitella, and filamentous algae (pond scum) and lower dosages to control planktonic algae. If there is uncertainty about the dosage begin with a lower dose and increase until control is achieved or until the maximum allowable level has been reached. Do not apply more than 1.0 ppm as metallic copper.

Before treating bodies of water, consult proper state authorities such as the Fisheries Commission or Conservation Department to obtain any necessary permits. NOTE: If treated water is to be used as a source of potable water, the metallic copper residual must not exceed 1, ppm.

CALCULATIONS FOR THE AMOUNT (VOLUME IN CUBIC FEET) OF WATER IMPOUNDED: If the amount of water to be treated is unknown, calculate water volume as follows: (1) Obtain surface area by measuring of regular shaped ponds or mapping of regular ponds or by reference to previously recorded engineering data or maps. (2) Calculate average depth by sounding in a regular pattern and taking the mean of these readings or by reference to previously obtained data. (3) Multiply surface area in feet by average depth in feet to obtain cubic feet of water volume. (4) Alternatively, multiply surface area in acres by average depth in feet to obtain total acre/feet of water. (5) For circular or elliptical shaped bodies of water, volume can be obtained by multiplying 3.14 X the radius of the body of water squared (radius X radius) X the average depth [(2) above].

w/ aerial EPA label

CALCULATION OF WATER FLOW IN DITCHES, STREAMS, AND IRRIGATION SYSTEMS: In ditches, streams, and canal type irrigation systems the amount of water flow in cubic feet per second is found by means of a weir or other measuring device. Multiply the water volume in cu. ft. times 7.5 to obtain gallons. If no weir or other measuring device is available, water flow and volume can be estimated as: Average width X Depth X Velocity in feet/sec = Cubic Feet Per Second (CFS). Velocity can be determined by the time it takes for a floating object to move a given distance. This measurement should be made three to four times and the results should be averaged. Note: 1 C.F.S./Hr. = 27,000 Gals.

CALCULATE GALLONS OF WATER TO BE TREATED AS FOLLOWS: (1) To find the capacity of a water storage containment or impounded waters in gallons, multiply the water volume in cubic feet times 7.5. or (2) if Acre/ft calculations were used multiply Acre/ft by 326,000 to obtain total gallons of water. (3) For flowing water measure in Cubic Feet Per Second- 1 C.F.S./HR = 27,000 gallons of water.

CALCULATIONS OF ACTIVE INGREDIENT TO BE ADDED IF RECOMMENDED USAGE RATE IS EXPRESSED IN PARTS PER MILLION (PPM): 1 Gallon of COPERLATE in 60,000 gallons of water yields 1 ppm of dissolved copper (metallic copper). If desired application rate is expressed in ppm: (1) Divide total gallons to be treated by 60,000 to yield total gallons of COPERLATE required to yield 1 ppm metallic copper. (2) Multiply the foregoing by the desired ppm treatment level to yield actual gallons required. Example: 240,000 gallons to be treated divided by 60,000 = 4 Gallons COPERLATE to achieve 1 ppm metallic copper. If a 0.2 ppm level is required then, 4 X 0.2 = 0.8 Gallons COPERLATE is required to achieve a 0.2 ppm metallic copper concentration.

#### SPECIFIC INSTRUCTIONS

To Control Algae in Impounded waters, Lakes, Ponds, and Reservoirs: Apply 1 pint of COPERLATE in each 7,500-300,000 gallons of water to be treated. One pint (16 ounces) of COPERLATE per each 7,500 to 300,000 gallons yields a range of 1 ppm (7,500 gallons) metallic copper down to 0.025 ppm (300,000 gallons) metallic copper. For best results, apply to warm, still water on a sunny day when algae are near the surface.

There are several methods by which to apply **COPERLATE** to impounded water. It may be applied from either the shoreline or from a boat. In smaller lakes, ponds, and reservoirs, (bodies of water) shoreline application through an electrically or manually operated hand spray device is preferred. In larger lakes, ponds and reservoirs, application by boat or direct injection into the influent stream is preferred.

#### **Shoreline Application:**

In smaller lakes, ponds, and reservoirs, **COPERLATE** is most easily applied by using either an electrically or manually operated hand spray device (sprayer). REMOVE THE SPRAY NOZZLE from the sprayer so that, when activated, the spray device dispenses a straight stream rather than a spray pattern. This will minimize or eliminate the potential for any drift and enable you to project the dispensed stream of **COPERLATE** further away from the shore line than if the spray nozzle were attached. Always use a sprayer which is constructed of materials listed in the Storage and Handling Equipment listed on this label. Only use this method on calm days or when wind is less than 10 mph. Never use this method of application when wind is in excess of 15 mph or when you must stand down wind of the direction of application or in any position that could expose you to drift. Never treat more than ½ of the body of water at one time. Wait 10 to 14 days between applications.

- 1. Based on your developed knowledge of the body of water, mark two points on opposing shorelines where, when drawing an imaginary line between them, ½ the volume of water is on each side of the line. Verify your water volume calculations.
- Determine the amount of COPERLATE required to treat the portion of the body of water selected in #1 above. Dilution of COPERLATE with clean water prior to application may be done so that uniform distribution is more easily accomplished.
- 3. Beginning at one mark on the shoreline, simultaneously begin walking towards the other mark while projecting a stream of COPERLATE or COPERLATE solution to a point approximately 5 feet from the shoreline.
- 4. When the opposing mark has been reached, reverse course and while walking back to the beginning mark, project a stream approximately 10 feet from the shoreline.
- Repeat steps 3 & 4, increasing the distance of stream projection from the shoreline by 5 feet each time, until all COPERLATE is dispensed.

## **Boat Application:**

In larger bodies of water, probably the most satisfactory and simplest method is to apply COPERLATE within the body of water from a boat. A small pump mounted in the boat can easily be used for this purpose. When using this method, COPERLATE is pumped from either its original container or a nurse tank (containing the amount of COPERLATE required for the application) into a hose (or manifolded gang of hoses) where hose(s) are trailing over the side or stern (back) of the boat and where the hose outlet is just below the surface of the water. While COPERLATE may be sprayed over the surface of the water, application through hoses eliminates or minimizes risk of drift.

If spraying, re-read about spraying application in the General Information portion of this label. Mount spray boom or nozzles so that nozzle height is no more than 2 feet above water surface. Alternatively, begin treatment along the shoreline and proceed outward until one-third to one-half of the total area has been treated. Follow procedure outlined for shore application for lakes, ponds, and reservoirs contained on this label.



w/ aerial EPA label

To apply by boat, the customary method is to make successive parallel applications across the body of water where the distance between each parallel line of application is from 20 to 200 feet. Initial application should be made along a line following the shoreline, with subsequent lines of application being parallel to the initial line of application and made progressively further away from the shoreline.

- 1. Based on your developed knowledge of the body of water, mark two points on opposing shorelines where, when drawing an imaginary line between them, not more than ½ the total volume of water within the lake, pond, or reservoir is on each side of the line.
- 2. Determine the total amount of COPERLATE required for treating the selected portion of the body of water. (Example: 40 gallons)
- 3. Determine the distance between your parallel lines of application.
- 4. Based on the surface area of the portion and shape of the body of water to be treated and the intended distance between parallel lines of application to be made, determine the number of parallel lines of application to be made. Plot these lines reasonably to scale on chart paper.
- 5. Sum the length (in feet) of all parallel lines of application. The result is the total distance you will travel during application. (Example: 20,000 feet)
- 6. Determine the speed (in mph) at which your boat will be traveling during application and convert this to Feet Per Minute (fpm) by multiplying mph X 88 (Example: 5 mph X 88 = 440 fpm) or refer to the following table:

| MPH | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| fpm | 176 | 264 | 352 | 440 | 528 | 616 | 704 | 792 | 880 |

- Divide the total gallons of COPERLATE you intend to apply to the selected section of body of water by the total distance determined in #5 above. This result will provide you the fractional gallons of COPERLATE per foot you will apply. (Example: 40 divided by 20,000 = .004 gallons/ft)
- 8. Multiply the fractional gallons of **COPERLATE** you will apply per foot as calculated in #7 above times your travel speed in FPM. This result is the gallons per minute (gpm) at which you must set your pump. (Example 440 fpm X .004 = 0.88 gpm)
- 9. Navigate to your starting point, engage your pump, and begin applying COPERLATE at your intended speed beginning close to the shoreline and proceeding outward in parallel lines of application.
- 10. If, at the end of application, all COPERLATE required for the application has not been dispensed, return to a line of application which, on your application chart, is about ¼ of the way out from the shoreline. Then, following your navigation chart, continue applying until all COPERLATE has been used.

CONTROL OF ALGAE AND BACTERIAL ODOR IN SEWAGE LAGOONS AND PITS (Except California): Application rates may vary depending on amounts of organic matter (sewage) in lagoons and pits. Application should be done by pouring COPERLATE directly from the container into the pit or lagoon. Several application points speed up dispersal. Use one gallon of full strength COPERLATE in 60,000 gallons (8,000 cubic feet) of sewage. For best results disperse COPERLATE evenly throughout sewage. Bacterial odors should be noticeably reduced in 1 or 2 weeks. Repeat application when odors reoccur.

Feedlot Run-off Lagoons: Add a portion of the required dosage of COPERLATE at several locations around the lagoon to speed dispersal of the product. A minimum of two applications per year (spring and fall) is recommended. Additional applications may be required as needed or when the lagoon is pumped. Animal Containment Pits: If pits are located under the confinement buildings, add COPERLATE directly to these pits. If the pits are outside, insert or inject COPERLATE into the transfer line to the pit. Other Organic Sludges: COPERLATE must be thoroughly mixed with sludge. Apply at the rate of one gallon COPERLATE in 30,000 gallons of sludge.

In Irrigation Conveyance Systems: For continuous addition, add one pint COPERLATE for each 7,500 - 300,000 gallons of water. Repeat on approximate 2-week intervals as required. For conveyance systems longer than 30 miles, it is recommended that the above dosage be dispersed among injection points every 5 to 30 miles. However, if the irrigation conveyance system is used for potable water, do not exceed the total dosage of one gallon in 60,000 gallons of water.

Sprinkler, Drip, or Other Types of Irrigation Equipment: COPERLATE must be applied continuously for the duration of the water application. Mixing instructions for dilutions of COPERLATE are 1 pint for each 7,500 to 300,000 gallons of water. Do not mix with basic substances. No agitation is required.



w/ aerial EPA label

9/9

**Drip Irrigation & Injection Instructions**: Calculate the amount of **COPERLATE** needed to maintain the drip rate for a period of 4 hours by multiplying Pints/Hr by 4 OR Fluid Ounces/Minute by 240. This dosage will maintain the copper level at the required ppm for 4 hours. **COPERLATE** must be introduced at a point of turbulence to insure proper dispersion. Place the required amount of **COPERLATE** into a tank equipped with a needle valve and set the drip rate as required using a stop watch and a measuring device. Alternatively, use a chemigation or dosing device calibrated and adjusted to inject the desired amounts of **COPERLATE**. Readjust as required if flow rates change. Distance of control will vary. Treatment points should be determined in the field and placed at required intervals for control. Periodic maintenance treatments may be required.

#### COPERLATE DRIP OR INJECTION RATE

|                 |           | Algae Growth      |                 |                              |          |  |  |
|-----------------|-----------|-------------------|-----------------|------------------------------|----------|--|--|
| Water Flow Rate |           | Mode<br>(1 ppm as | rate<br>copper) | Light<br>(0.2 ppm as copper) |          |  |  |
| CFS             | Gal./Min. | Pints/Hour        | Oz./Min.        | Pints/Hr.                    | Oz./Min. |  |  |
| 1               | 450       | 3.6               | 1.0             | 0.7                          | 0.2      |  |  |
| 2               | 900       | 7.2               | 1.9             | 1.4                          | 0.4      |  |  |
| 3               | 1,350     | 10.8              | 2.9             | 2.2                          | 0.6      |  |  |
| 4               | 1,800     | 14.4              | 3.8             | 2.9                          | 0.8      |  |  |
| 5               | 2,250     | 18                | 4.8             | 3.6                          | 1.0      |  |  |

TO CONTROL ALGAE IN RICE (Domestic and Wild) FIELDS: Application should be made when algae have formed on the soil surface in the flooded field. Applications are most effective when made prior to the algae's leaving the soil surface and rising to the water surface. Depending on depth, 1 quart to 1 gallon per acre is normally sufficient. Higher use rates are acceptable, but never use more than 7 gallons per acre. COPERLATE can be metered into the rice field as water is being applied or slug fed into each paddy when water is being held.

TO CONTROL TADPOLE SHRIMP IN RICE FIELDS: Application should be made to the flooded fields any time the pest appears from planting time until the seedlings are well rooted and have emerged through the water. Apply 2 gallons COPERLATE REPORT TO UP to 4 gallons per acre, but not more than 2.5 ppm of the total volume of water (see table below). The use rate per acre should be determined by the water depth and flow. Use the lower rate at minimum flow and water depth and the higher rate when water depth and flow are maximum.

| Crop                          | Maximum per<br>Application Rate<br>(lbs. Cu²⁺/A)¹ | Maximum Annual Rate<br>(lbs. Cu²+/A)² | Minimum Retreatment<br>Interval <sup>3</sup> | Notes |
|-------------------------------|---------------------------------------------------|---------------------------------------|----------------------------------------------|-------|
| Tadpole shrimp in rice fields | 2.5 ppm                                           | . n/a                                 | n/a                                          | None  |

- 1 Maximum pounds of metallic copper which may be applied to an acre for each application.
- 2 Maximum amount of metallic copper which may be applied to an acre each growing season. Lower single application rates at higher application frequencies may be used.
- 3 Minimum number of days between each application.

There are several methods by which to apply **COPERLATE** to rice fields. It may be applied from the shoreline, by plane or from a boat. (see Shoreline and Boat applications under Specific Instructions, page 4-5.)

For aerial applications, insure all aircraft mounted components used to hold or distribute and spray Coperlate are constructed of materials outlined in the Application and Handling section of this label. Never use materials for this application which are inconsistent with this labeling. Insure all distribution connections are tight and free of leaks. Failure to follow these instructions could result in the compromise of air frame integrity. In this case air frame failure could result. (see page 3 under General Information for further restrictions on spraying COPERLATE.)

#### LIMITED WARRANTY AND LIMITATION OF REMEDIES

To the extent consistent with applicable law: Seller warrants that the product conforms to the chemical description and is reasonably the for the purpose stated on the label for the use under normal conditions but makes no other warranties of FITNESGOOR MERCHANTABILITY, expressed or implied, or any other warranty if the product is used contrary to the label instructions, or under single conditions or under conditions not foreseeable to the seller. In no case shall the seller 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 (including lost profits) 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.