



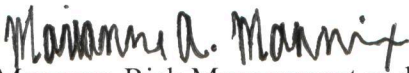
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460


OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION


January 12, 2017


**MEMORANDUM**

SUBJECT: **Amended:** Paraquat Dichloride Human Health Mitigation Decision  
[This amendment corrects the “Deadline for Applications for Label Amendments/New Product Registrations to Comply with Closed System Requirement” listed on page 13 from March 30, 2018 to March 30, 2019. This document supersedes the December 14, 2016 Paraquat Dichloride Human Health Mitigation Decision.]

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**OVERVIEW**

On March 3, 2016, EPA published the *Paraquat Dichloride: Proposed Interim Mitigation Decision* for a 60-day public comment period in the paraquat dichloride Registration Review docket. This Human Health Mitigation Decision document finalizes the mitigation decision and the implementation plan for this decision. More details about paraquat human health incidents and Registration Review can be found in the paraquat Registration Review docket (EPA-HQ-OPP-2011-0855) at [www.regulations.gov](http://www.regulations.gov).

Based on the high number and severity of human health incidents associated with the pesticide paraquat dichloride (also referred to as paraquat), the Environmental Protection Agency (EPA or the Agency) has determined the following risk mitigation measures are necessary in order for pesticide products containing paraquat to meet the Federal Insecticide, Fungicide, and

Rodenticide Act (FIFRA) standard for registration:

1. Label changes emphasizing paraquat toxicity and supplemental warning materials;
2. Targeted training materials for paraquat users;
3. Closed-system packaging for all non-bulk (less than 120 gallon) end use product containers of paraquat; and
4. Restricting the use of all paraquat products to certified applicators only (i.e., prohibiting use by uncertified persons working under the supervision of a certified applicator).

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## **1. BACKGROUND**

This document is the EPA's Human Health Mitigation Decision for the pesticide active ingredient, paraquat. A combination of public concern and EPA's evaluation of incident data prompted an in-depth statistical analysis of paraquat incidents. The results of this analysis compelled the Agency to pursue risk mitigation measures to address human health incidents involving paraquat ahead of the typical mitigation phase of Registration Review.

EPA expects that the implementation of the mitigation measures described in this risk mitigation document will allow paraquat products to remain available to users while reducing the number and severity of human health incidents.

Notwithstanding this action, paraquat is still undergoing EPA's re-evaluation process, Registration Review. The Registration Review Draft Risk Assessment is scheduled to publish in late 2017 and a final Registration Review decision, which may require additional mitigation beyond the measures described herein, is anticipated in 2018.

## **2. SUMMARY OF HUMAN HEALTH RISK**

Paraquat is an herbicide and desiccant classified as a restricted use pesticide (RUP) and is acutely toxic through all routes of exposure. Numerous human incidents involving the ingestion of paraquat, both accidental and intentional, have been reported to EPA through local poison control centers, mandatory Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Section 6(a)(2) reports from registrants, other federal and state health and environmental agencies, and individual consumers. Toxicity information indicates that one sip can be lethal and there is no known antidote. Paraquat is a known suicide agent; moreover, there is a disproportionately high number of deaths resulting from the accidental ingestion of paraquat compared to similar pesticides. The accidental ingestion incidents often result from paraquat being stored in beverage containers, contrary to clear label language prohibiting transfer into other containers. Paraquat is also corrosive to skin and is associated with a number of severe worker incidents involving leakage or accidental spray in occupational settings.

For further details on paraquat toxicity and human health incidents, refer to the March 2, 2016 *Paraquat Dichloride: Proposed Interim Mitigation Decision* located in the paraquat Registration Review docket (EPA-HQ-OPP-2011-0855).

## **3. SUMMARY OF BENEFITS OF PARAQUAT**

In the United States, paraquat dichloride was first registered in 1964 and it was one of the most widely used herbicides until it was overtaken by glyphosate (Pesticide News, 1996). Paraquat is a rapidly acting, broad-spectrum, contact herbicide used for weed control and as a desiccant. It is applied to the foliage of weeds as a burn-down treatment before planting, to control weeds in non-agricultural lands, or to desiccate crops prior to harvest. Paraquat is a non-selective herbicide (Group 22, Photosystem I electron diverters) which kills the green plant tissues on contact (WSSA, 2014). Unlike many other herbicides, paraquat is effective under low temperatures and when weeds are not actively growing (e.g., early season seedbed preparation). Rainfall soon after application has little or no effect on its performance, unlike most other

herbicides. The paraquat that contacts the soil is deactivated by tight adsorption to clay particles. This property allows it to be applied immediately before planting crops or seedling emergence. Paraquat is an important pre-harvest desiccation treatment used on cotton and potatoes.

#### **4. PROPOSED DECISION**

On March 3, 2016, the Agency published the *Paraquat Dichloride: Proposed Interim Mitigation Decision*, which includes background information on paraquat use and usage, toxicity and incidents, a summary of the human health risks associated with paraquat use, and proposed mitigation. The Agency solicited public comment on this document for 60 days, from March 3, 2016 – May 9, 2016.

EPA proposed the following mitigation measures to minimize human health incidents associated with paraquat in the March 2016 *Proposed Interim Mitigation Decision*:

- a) Label changes emphasizing paraquat toxicity and supplemental warning materials;
- b) Targeted stewardship/training materials for paraquat users;
- c) Prohibition of application from hand-held and backpack equipment;
- d) A closed-system requirement for transferring paraquat out of all containers; and
- e) Restricting use to certified applicators only (i.e., prohibiting application by individuals working under the supervision of a certified applicator).

For a detailed discussion of each mitigation measure and information on potential impacts, refer to the March 2, 2016 *Paraquat Dichloride: Proposed Interim Mitigation Decision* located in the paraquat Registration Review docket (EPA-HQ-OPP-2011-0855).

#### **5. COMMENTS RECEIVED**

The Agency received 76 comments on the *Proposed Interim Mitigation Decision* from a number of individuals and organizations including the United States Department of Agriculture (USDA), the Weed Science Society of America (WSSA), the Pesticide Action Network (PAN), several commodity group associations, farm bureaus, agribusiness associations, academia/extension organizations, growers, applicators, registrants, non-governmental organizations, and anonymous individuals.

Almost all commenters remarked on the importance of paraquat as an effective, cost-efficient herbicide and desiccant as well as its role as a component in herbicide-resistance management and conservation tillage practices. Many commenters were supportive of label changes, supplemental warning materials, and specialized training materials. Some, albeit fewer, commenters were also in favor of the other mitigation measures including the prohibition of handheld and backpack application, restricting use to certified applicators only, and closed system packaging. Additionally, many commenters asserted that backpack and handheld equipment are necessary for research and for certain crops. Lastly, EPA received many comments highlighting the importance of tank mixing for effective weed management.

While the Agency did receive some comments opposed to the requirement for registrants to develop and for applicators to take paraquat-specific training, EPA believes that training is an effective way to increase applicators' skill and knowledge so they are better prepared to effectively manage paraquat and are able to understand and comply with revised labeling. EPA anticipates that training developed and implemented by registrants to foster product stewardship will help reduce potential risks associated with accidental ingestion, occupational exposure to paraquat, and failure to comply with paraquat product labeling.

The Agency received many comments highlighting the importance of handheld and backpack application methods for spot treatment, for small plot research, for smaller growers, and growers of specialty crops like orchards, nuts, and woody perennials. EPA received a few comments stating that since these application methods are critical, they should be maintained even if a closed system is required.

For a detailed summary of these comments and the Agency's responses, see the *EPA Response to Comments Received on the Paraquat Dichloride: Proposed Interim Mitigation Decision* document located in the Registration Review docket for paraquat (EPA-HQ-OPP-2011-0855).

## **6. HUMAN HEALTH MITIGATION DECISION**

The Agency has determined that products containing paraquat, unless labeled and used as required in this Human Health Mitigation Decision, would present unreasonable risks to human health based on the FIFRA standard for registration. Accordingly, should a registrant fail to implement any of the risk mitigation measures identified in the decision, the Agency may take regulatory action to address the risk concerns from the use of the affected products. If all measures outlined in the risk mitigation decision are adopted, EPA anticipates that the current ingestion and occupational exposure risks associated with paraquat products will be adequately mitigated.

Currently registered paraquat products will meet the FIFRA section 3(c)(5) registration criteria if: (i) the measures outlined in the risk mitigation decision are adopted; (ii) applications for amended/new registrations to implement these measures are submitted; and (iii) voluntary cancellations for products which do not meet these mitigation measures are submitted.

Notwithstanding this action, paraquat is still undergoing EPA's re-evaluation process, Registration Review. The Registration Review Draft Risk Assessment is scheduled to publish in late 2017 and a final Registration Review decision, which may require additional mitigation beyond the measures described herein, is anticipated in 2018.

EPA has determined the following risk mitigation measures are necessary in order for pesticide products containing paraquat dichloride to meet the standard for registration:

1. Label changes emphasizing paraquat toxicity and supplemental warning materials;
2. Targeted training materials for paraquat users;
3. Closed-system packaging for all non-bulk (less than 120 gallon) end use product containers of paraquat; and

4. Restricting the use of all paraquat products to certified applicators only (i.e., prohibiting use by uncertified persons working under the supervision of a certified applicator).

Each component of the mitigation, as well as the research exemption are discussed in detail below.

#### **a. LABEL CHANGES AND SUPPLEMENTAL WARNING MATERIALS**

The Agency is requiring updated label language highlighting ingestion risk and clarifying toxicity in English and Spanish language formats. Additionally, EPA is requiring supplemental warning materials consisting of (1) a warning sticker affixed to the cap of all paraquat containers with the text “DANGER-ONE SIP CAN KILL” accompanied by the image of a skull and crossbones symbol (2) a “product package safety requirements sticker” reiterating important warning statements to be affixed to the opposite side of the label on each paraquat container; and (3) a product warning handout called a “counter card” reiterating the same important warning information to be distributed with every paraquat container. All of the supplemental warning materials must feature these messages in English, Spanish, and pictogram format.

For a detailed list of the expected label amendments and language required to be included on the product package safety requirements sticker and counter card, see **Appendix A and Appendix B**.

All paraquat registrants are required to submit label amendments and supplemental warning materials to the Agency by March 30, 2017.

#### **b. TRAINING MATERIALS**

EPA is requiring all applicators who handle paraquat to take an EPA-approved paraquat training program. EPA-approved paraquat training programs must provide information on: (1) paraquat toxicity; (2) a summary of the new label requirements and restrictions; (3) consequences and examples of misuse of paraquat; (4) how to apply paraquat with various application methods, including ensuring all connections are tightly fit (especially backpack/handheld equipment); (5) what to do in case of accidental exposure, and (6) appropriate handling, storage, disposal, and personal protective equipment requirements and instructions.

The paraquat training program must be developed by all paraquat registrants, and be available via an internet link included on all paraquat end-use labels. In cases where state-based certified applicator training programs adequately address the aforementioned required aspects of an EPA-approved paraquat training program, they may be determined to be equivalent training materials. All persons handling paraquat are expected to take the training every 3 years and retain documentation of successful completion.

To implement this mitigation measure, all registrants are expected to submit draft training materials to the Agency no later than March 30, 2017. By March 30, 2018, all registrants are expected to submit finalized training materials to the Agency. All paraquat applicators will be required to take the training and retain documentation once label amendments have been finalized and the link is available on the label.

### **c. HAND-HELD/BACKPACK EQUIPMENT**

The Agency is amending the March 2016 proposal with respect to hand-held and backpack equipment. Based on compelling public comment, EPA is permitting the continued use of handheld and backpack application equipment, so long as it complies with EPA-approved closed system technology. For more details on EPA's closed system standards, see section **6.d.**, below. Additionally, paraquat products intended for handheld and backpack equipment should contain an indicator dye to aid in early detection of paraquat leaks and spills. The Agency is aware that there are no paraquat products currently available that meet these criteria. Therefore, the Agency is allowing a two-year period for registrants to develop products that would meet these criteria.

To implement this mitigation measure, no later than March 30, 2019, registrants must either submit amended labels or concurrently submit a request for voluntary cancellation of their paraquat registration(s) and an application(s) for replacement products which comply with the paraquat closed system; whichever is more appropriate. The voluntary cancellation(s) will become effective when EPA registers the replacement products which conform to EPA-approved closed system standards and formulation. For more details on the implementation of this mitigation measure, refer to **Section 7.** of this document.

### **d. CLOSED SYSTEM REQUIREMENT**

EPA is requiring that all paraquat non-bulk (less than 120 gallon) end use product containers comply with EPA-approved closed system standards. The closed system packaging for paraquat products must be engineered so that paraquat can only be removed from the container using closed system technology meeting the following EPA-approved standards:

- the closed system must connect to the container in a way that the closed system is the only feasible way to remove paraquat from the container without destroying the container; therefore, a screw cap for the pourable closure on a typical pesticide container is not sufficient; and
- the closed system must remove the paraquat from its original container and transfer the paraquat to the application equipment through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of the mixer or loader to the paraquat (except for the negligible escape associated with normal operation of the system).

All paraquat closed system packaging must be approved by EPA.

EPA is aware that tank mixing is an important practice for paraquat users, and that jar testing for compatibility may be a critical practice. Once the closed system requirement takes effect, registrants must provide a link on paraquat product labels to an on-line resource of compatible tank mix partners.

To implement this mitigation measure, by March 30, 2019, registrants are required to either submit amended labels, or concurrently submit a request for voluntary cancellation of its paraquat registration(s) and an application(s) for replacement products which comply with the



EPA-approved closed system standards; whichever is more appropriate (or an application for a research use only product registration). The voluntary cancellation(s) will become effective when EPA registers the replacement products which conform to EPA-approved closed system standards. For more details on the implementation of this mitigation measure, refer to **Section 7** of this document.

**e. CERTIFIED APPLICATORS ONLY**

Paraquat products are only to be used by certified applicators who have met the applicator competency standards established by states, tribal, and federal agencies to use or handle paraquat. They are not to be used by uncertified individuals working under the supervision of a certified applicator.

To implement this mitigation measure, all registrants are expected to prominently display the phrase “to be used by certified applicators only – not to be used by uncertified persons working under the supervision of a certified applicator” on all paraquat labels. Label amendments must be submitted to the Agency no later than March 30, 2017.

**f. RESEARCH EXEMPTION**

The Agency recognizes that paraquat is widely used in agricultural research as a standard burndown and desiccant treatment, to which other herbicides and desiccants are compared. Because of its use as a standard treatment, it has high benefits for use in small scale research trials. Based on these facts and the comments received regarding the importance of paraquat for research purposes, EPA will grant a research exemption from the closed system requirement and the ‘certified applicator only’ requirement.

In order to allow researchers to use paraquat while ensuring the overall safe use of the pesticide, EPA will consider, on a case-by-case basis, applications for products which are specific for research use. These products should contain appropriate labeling, be of an appropriate size, and should include registrant assurance of controlled distribution.

This decision does not preclude research uses of paraquat consistent with existing regulations at 40 CFR 172.3.

**7. IMPLEMENTATION**

This mitigation decision for paraquat will be implemented through a three-phased approach. Phase 1 involves amending all paraquat product labels to be consistent with the labeling statements identified in **Appendix A** of this document, providing supplemental warning materials, and providing draft paraquat training materials to the Agency for review. Registrants are required to comply with Phase 1 by March 30, 2017. In Phase 2, registrants are required to submit finalized training materials to EPA and provide information on their progress toward fulfilling the closed system requirement with a deadline of March 30, 2018. Phase 3 involves implementing the closed-system requirement and amendment or voluntary cancellation of any paraquat product that does not meet EPA-approved closed system standards. Registrants must complete Phase 3 by March 30, 2019.

Registrants who do not intend to comply with all phases of the mitigation for some or all of their paraquat products should submit voluntary cancellation request letter(s) by March 30, 2017, specifying an effective date for the cancellation(s) no later than September 30, 2020.

**Phase 1 – March 30, 2017:**

**A. Amendment of Paraquat Product Registrations (Deadline: March 30, 2017)**

All paraquat registrants are required to submit amended labels to the Agency that incorporate the label changes summarized in **Appendix A:**

- a. label statements emphasizing toxicity;
- b. a placeholder for a link to paraquat training materials; and
- c. prominent display of the label statement “To be used by certified applicators only – not to be used by uncertified persons working under the supervision of a certified applicator”.

Applications for amended registration consistent with the risk mitigation decision are due on or before March 30, 2017. It is EPA’s intention to grant amended registration requests submitted for such products as expeditiously as possible. Amendment applications will not be subject to registration service fees required under the Pesticide Registration Improvement Renewal Act of 2012 (PRIA3).

September 30, 2018 shall be the last day for registrants to sell or distribute paraquat products not containing the label language required in Phase 1 of this Mitigation Decision. This limitation would apply to those products registered both on and after the publication of the Federal Register announcing availability of the decision. Paraquat products that do not comply with EPA’s Phase 1 label amendments for paraquat that a registrant sells or distributes after September 30, 2018, would not meet the FIFRA standard for registration.

Persons other than the registrant may continue to sell and/or use existing stocks of products with the previously approved labeling until such stocks are exhausted, provided that such use is consistent with the terms of the previously approved labeling.

**B. Submission of Supplemental Warning Materials (Deadline: March 30, 2017)**

All paraquat registrants are required to submit supplemental warning materials as listed in **Appendix B**, no later than March 30, 2017.

**C. Submission of Draft Paraquat Training Materials (Deadline: March 30, 2017)**

Registrants are required to develop an EPA-approved paraquat training program and provide draft training materials for Agency review by March 30, 2017. For a review of

topics to be included in EPA-approved training programs, see section **6.b.** of this document.

### **Phase 2 – March 30, 2018:**

#### **A. Submission of Closed System Requirement Prototype or Schematic (Deadline March 30, 2018)**

Registrants are required to provide a prototype or schematic of their planned closed system to the Agency no later than March 30, 2018 indicating progress in developing or acquiring such technologies and allowing an opportunity for EPA to provide feedback, as all paraquat closed system packaging must be approved by EPA. For a review of standards for EPA-approved closed systems, see section **6.d.** of this document.

#### **B. Submission of Finalized Training Materials (Deadline March 30, 2018)**

Registrants are expected to submit finalized paraquat training materials for EPA approval by March 30, 2018. Applicators are required to take an EPA-approved paraquat training program in order to use paraquat once the training link is listed on paraquat product labels.

### **Phase 3 – March 30, 2019:**

#### **A. Closed System Implementation (Deadline: March 30, 2019)**

If paraquat registrants intend to support the closed system requirement and maintain paraquat registrations, each paraquat registrant must either submit amended labels or concurrently submit a request for voluntary cancellation of its paraquat registration(s) and an application(s) for replacement products which comply with the EPA-approved paraquat closed system standards no later than March 30, 2019. The request for voluntary cancellation should include a request to waive the 180-day comment period provided in Section 6(f)(1)(C) of FIFRA. The request will provide that it is irrevocable and unconditional, except that any such request for voluntary cancellation may be expressly conditioned so that the cancellation will not take effect until EPA grants an application(s) for replacement of the registration.

If registrants do not intend to comply with the EPA-approved paraquat closed system standards, they should submit a notice of intent to voluntarily cancel their paraquat registrations under FIFRA Section 6(f)(1) with an effective date no later than September 30, 2020.

It is EPA's intention to grant voluntary cancellation requests submitted for such products as expeditiously as possible. If a request for voluntary cancellation is expressly conditioned upon EPA's granting of an application for replacement registration, EPA will not grant the request for voluntary cancellation prior to approving the application for replacement registration, unless the relevant paraquat registrant fails to submit a complete

application for replacement paraquat products which comply with the closed system requirement. New product applications will not be subject to registration service fees required under the Pesticide Registration Improvement Renewal Act of 2012 (PRIA3).

September 30, 2020 shall be the last day for registrants to sell or distribute paraquat products not complying with the closed system requirement aspect of the December 2016 *Paraquat Dichloride Human Health Mitigation Decision*. This limitation would apply to those products registered both on and after the publication of the Federal Register announcing availability of the decision. Paraquat products that do not comply with EPA's closed system requirement for paraquat that a registrant sells or distributes after September 30, 2020, would not meet the FIFRA standards for registration.

Persons other than the registrant may continue to sell and/or use existing stocks of paraquat products with the previously approved labeling until such stocks are exhausted, provided that such use is consistent with the terms of the previously approved labeling.

Registrants should submit FIFRA 6(f) voluntary cancellation requests, amended labels, and any other EPA requested materials to the mailing address provided below with an electronic copy to [mannix.marianne@epa.gov](mailto:mannix.marianne@epa.gov). Submissions should reference "Paraquat Registration Review – Human Health Mitigation".

Mailing Address:

Marianne Mannix  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7508P)  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Delivery Address:

Marianne Mannix  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7508P)  
2777 South Crystal Drive  
Arlington, VA 22202

New product registration applications with a copy of associated amended labels should be submitted to the following addresses:

Mailing Address:

Reuben Baris  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7505P)  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Delivery Address:

Reuben Baris  
U.S. Environmental Protection Agency  
Office of Pesticide Programs (7505P)  
2777 South Crystal Drive  
Arlington, VA 22202

## 8. TIMELINE

<b>Paraquat Dichloride Human Health Mitigation Decision Implementation Timeline</b>	
<b>Activity</b>	<b>Date</b>
Publication of Paraquat Dichloride Human Health Mitigation Decision	December 2016
<b>Phase 1</b>	
Label Amendments Submission Deadline (To include: <ul style="list-style-type: none"> <li>• Label Statements Highlighting Toxicity</li> <li>• Certified Applicator Only Statement</li> <li>• EPA-Approved Paraquat Training Program Statement)</li> </ul>	March 30, 2017
Supplemental Warning Materials Submission Deadline	March 30, 2017
Draft Training Materials Submission Deadline	March 30, 2017
<b>Phase 2</b>	
Finalized Training Materials Submission Deadline	March 30, 2018
Closed System Schematic/Prototype Submission Deadline	March 30, 2018
Last Date for Sale/Distribution of Paraquat Products Which do not Comply with Phase 1 (Label Amendments & Supplemental Warning Materials)	September 30, 2018
<b>Phase 3</b>	
Deadline for Applications for Label Amendments/New Product Registrations to Comply with Closed System Requirement	March 30, 2019
Last Date for Sale/Distribution of Paraquat Products which do not Comply with Phase 3 (Closed System Requirement)	September 30, 2020

## 9. REFERENCES

*[Amended] Paraquat & Herbicide Alternatives: Incident Rate Analysis.* James Nguyen and Elizabeth Evans. January 20, 2016.

*Paraquat Dichloride (Paraquat) Human Health Risk Scoping Document in Support of Registration Review.* Becky Daiss, Thurston Morton, and Ray Kent. December 6, 2011.

*Paraquat Dichloride: Review of Human Ingestion Incidents.* Evans, Elizabeth. May 21, 2014.

*Paraquat Dichloride: Review of Human Incidents.* Khin Swe Oo. December 12, 2011.

*Paraquat Dichloride: Proposed Interim Mitigation Decision.* Marianne Mannix. March 3, 2016.

*Paraquat: Potential Impacts of Proposed Mitigation.* Jonathan Becker, Bill Chism, Sunil Ratnayake, and Derek Berwald. March 2, 2016.

Pesticide News. 1996. Paraquat. Pesticide News. No. 32, June 1996, p. 20-21. <http://www.pan-uk.org/pestnews/Actives/paraquat.htm>.

Weed Science Society of America. 2014. Herbicide Handbook, 10<sup>th</sup> Edition.

## APPENDIX A. PARAQUAT DICHLORIDE HUMAN HEALTH MITIGATION LABEL TABLE

Summary of Labeling Changes for Paraquat Dichloride		
Description	Labeling Language for Paraquat Dichloride Products	Placement on Label
<b>Highlighting Paraquat Ingestion Risk and Toxicity</b>	<ul style="list-style-type: none"> <li>• DANGER/PELIGRO</li> <li>• POISON/VENENO</li> <li>• CORROSIVE TO SKIN AND EYES/ CORROSIVO A LA PIEL Y A LOS OJOS</li> <li>• NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES/NUNCA TRANSFEIERA ESTE PRODUCTO EN ALIMENTOS O BEBIDAS EN RECIPIENTES O ENVASES NO EXPRESAMENT PREVISTO PARA PESTICIDES</li> <li>• KEEP OUT OF REACH OF CHILDREN/MANTENER FUERA DEL ALCANCE DE LOS NIÑOS</li> <li>• READ ENTIRE LABEL PRIOR TO USING THIS PRODUCT/ LEA TODA LA ETIQUETA ANTES DE UTILIZAR ESTE PRODUCTO</li> <li>• IN THE CASE OF AN ACCIDENT, SEEK IMMEDIATE MEDICAL ATTENTION. SYMPTOMS ARE PROLONGED, PAINFUL, AND CAN BE FATAL/EN CASO DE ACCIDENTE, BUSQUE ATENCIÓN MÉDICA INMEDIATAMENTE.</li> <li>• 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).</li> </ul>	Front Panel
	<ul style="list-style-type: none"> <li>• Danger – Fatal If Swallowed or Inhaled/LETAL SI SE INGIERE O INHALA</li> <li>• Causes Severe Eye Injury/ CAUSA DAÑO SEVERO EN LOS OJOS</li> <li>• Corrosive to Skin/CORROSIVO A LA PIEL</li> <li>• NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES/NUNCA TRANSFEIERA ESTE PRODUCTO EN ALIMENTOS O BEBIDAS EN RECIPIENTES O ENVASES NO EXPRESAMENT PREVISTO PARA PESTICIDES</li> <li>• Store Tightly Closed in Original Container, And in A Locked Place Away from Children and Animals/ALMACENE EN CONTENDOR ORIGINAL COMPLETAMENTE CERRADO EN UN LUGAR CON LLAVE LEJOS DE NIÑOS Y/Ó ANIMALES</li> </ul>	In Warning Box (or Area)

<b>Summary of Labeling Changes for Paraquat Dichloride</b>		
<b>Description</b>	<b>Labeling Language for Paraquat Dichloride Products</b>	<b>Placement on Label</b>
	<ul style="list-style-type: none"> <li>• Never Use this product in Residential or Public Recreational Settings (e.g. Homes, Home Gardens, Schools, Recreational Parks, Golf Courses, and/or Playgrounds)/NUNCA UTILICE ESTE PRODUCTO EN ÁREAS RESIDENCIALES Y/Ó LUGARES RECREACIONALES ABIERTOS AL PÚBLICO (e.g. Casas/Hogares, Jardines, Escuelas, Parques Recreacionales y/ó Infantiles y Campos de Golf)</li> <li>• This product is toxic! An alerting agent (odor) has been added to help prevent accidental ingestion/Este producto es TÓXICO! Un agente de alerta (olor) se ha añadido para ayudar a evitar la ingestión accidental</li> <li>• See Back of Product Container for Important Safety Information/Ver Detrás del Contenedor del Producto para Información de Seguridad Importante</li> </ul>	
<b>Certified Applicators Only Restriction</b>	<ul style="list-style-type: none"> <li>• To be used by certified applicators only – <u>not</u> to be used by uncertified persons working under the supervision of a certified applicator.</li> </ul>	Restricted Use Pesticide Box at the top of Front Panel
<b>Training Materials</b>	<ul style="list-style-type: none"> <li>• Applicators must complete an EPA approved paraquat training listed on the following website [placeholder for training website]. The training must be completed a minimum of every three years.</li> </ul>	Certified Applicator Training Section (a new section to be included on all paraquat labels before Directions for Use Section)



## APPENDIX B. REQUIREMENTS FOR PARAQUAT SUPPLEMENTAL WARNING MATERIALS

1. Mock-up displaying required components of sticker to be affixed to the cap of all paraquat dichloride product containers



2. Required Language for Product Package Safety Requirements Sticker to be affixed to all paraquat dichloride product containers

Required Language	Language Format
NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES	English, Spanish, Pictogram
ONE SIP CAN KILL	English, Spanish, Pictogram
CONTACT WITH SKIN MAY RESULT IN POISONING	English, Spanish, Pictogram
EXPOSURE TO EYES MAY CAUSE SUBSTANTIAL EYE INJURY	English, Spanish, Pictogram
PARAQUAT SHOULD ALWAYS BE STORED TIGHTLY CLOSED IN ORIGINAL CONTAINER, AND IN A LOCKED PLACE AWAY FROM CHILDREN AND ANIMALS	English, Spanish, Pictogram
READ ENTIRE LABEL PRIOR TO OPENING THIS PRODUCT	English, Spanish, Pictogram

3. Required Language for Paraquat Dichloride Safety Counter Card to be distributed with all paraquat dichloride products

Required Language	Language Format
NEVER TRANSFER [PRODUCT NAME] INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR [PRODUCT NAME]	English, Spanish, Pictogram
ONE SIP CAN KILL	English, Spanish, Pictogram
CONTACT WITH SKIN MAY RESULT IN POISONING	English, Spanish, Pictogram
EXPOSURE TO EYES MAY CAUSE SUBSTANTIAL EYE INJURY	English, Spanish, Pictogram
PARAQUAT SHOULD ALWAYS BE STORED TIGHTLY CLOSED IN ORIGINAL CONTAINER, AND IN A LOCKED PLACE AWAY FROM CHILDREN AND ANIMALS	English, Spanish, Pictogram
READ ENTIRE LABEL PRIOR TO OPENING THIS PRODUCT	English, Spanish, Pictogram
DISREGARDING LABEL DIRECTIONS IS A VIOLATION OF FEDERAL LAW AND IS PUNISHABLE BY SUCH	English, Spanish