

Paraquat Stewardship Update

November 2019



syngenta

CLASSIFICATION: PUBLIC

TM

Why did EPA require changes to paraquat products?

- Paraquat is currently undergoing registration review. As part of this, EPA published its “Paraquat Human Health Mitigation Decision” in December 2016.
- In it, EPA stated: “...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*** [emphasis added].”

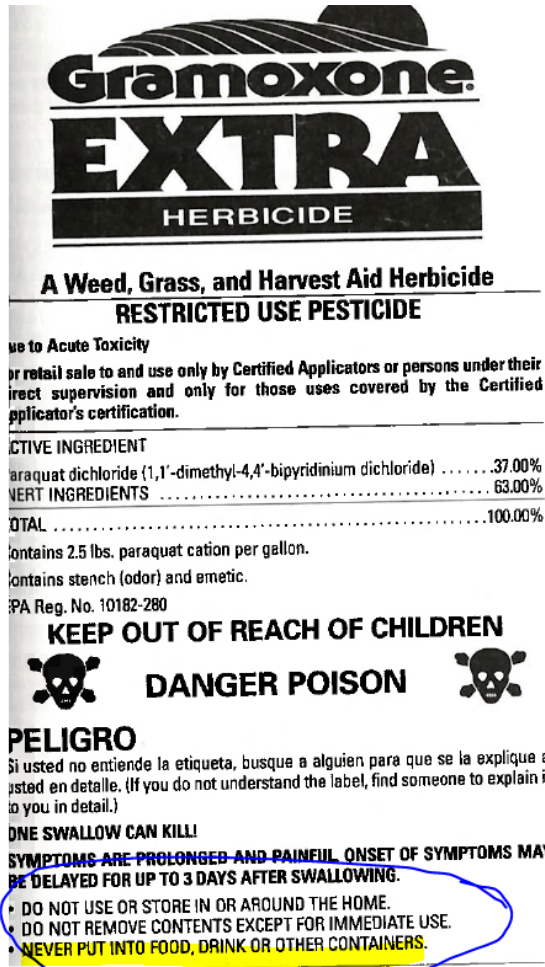
Source: Paraquat Dichloride Human Health Mitigation Decision, December 14, 2016: EPA-HQ-OPP-2011-0855-0112

17 people died between 2000 and 2016 from accidental ingestion of paraquat. These were the result of paraquat being illegally transferred to beverage containers and mistakenly consumed.

“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...”

Source: **Amended:** Paraquat Dichloride Human Health Mitigation Decision, January 12, 2017:
EPA-HQ-OPP-2011-0855-0115

Label language prohibiting the transfer of paraquat into food or beverage containers is nothing new.



**Gramoxone
EXTRA**
HERBICIDE



A Weed, Grass, and Harvest Aid Herbicide
RESTRICTED USE PESTICIDE

Use to Acute Toxicity
For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified applicator's certification.

ACTIVE INGREDIENT
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride) 37.00%
INERT INGREDIENTS 63.00%
TOTAL 100.00%

Contains 2.5 lbs. paraquat cation per gallon.
Contains stench (odor) and emetic.
EPA Reg. No. 10182-280

KEEP OUT OF REACH OF CHILDREN

 **DANGER POISON** 

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.)

ONE SWALLOW CAN KILL!
SYMPTOMS ARE PROLONGED AND PAINFUL. ONSET OF SYMPTOMS MAY BE DELAYED FOR UP TO 3 DAYS AFTER SWALLOWING.


- DO NOT USE OR STORE IN OR AROUND THE HOME.
- DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE.
- NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS.

1996 Label

Active Ingredient:
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride) 30.1%
Other Ingredients: 69.9%
Total: 100.0%

Gramoxone SL 2.0 contains 2.0 pounds paraquat cation per gallon as 2.762 pounds paraquat dichloride per gallon.
Gramoxone SL 2.0 contains alerting agent (odor), emetic, and dye.
EPA Reg. No. 100-1431 EPA Est. 100-LA-001
Product of the United Kingdom Formulated in the USA
SCP 1431A-L1G 1118 4104090

**KEEP OUT OF REACH OF CHILDREN/
MANTENER FUERA DEL ALCANCE DE
LOS NIÑOS.**

DANGER / POISON 
PELIGRO / VENENO

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.)

- CORROSIVE TO SKIN AND EYES.
- NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES.
- READ ENTIRE LABEL PRIOR TO USING THIS PRODUCT.
- IN THE CASE OF AN ACCIDENT, SEEK IMMEDIATE MEDICAL ATTENTION. SYMPTOMS ARE PROLONGED, PAINFUL, AND CAN BE FATAL.

2019 Label

What changes did EPA mandate?

EPA mandated the following mitigation measures in the following areas to allow continued use of paraquat:

- Label Changes and Supplemental Warning Information
 - Including Paraquat-specific Training and Requirement for Paraquat Users to be Certified Applicators
- Closed-System Requirement

Source: **Amended:** Paraquat Dichloride Human Health Mitigation Decision, January 12, 2017:
EPA-HQ-OPP-2011-0855-0115

Timeline for EPA-required Paraquat Changes: *Label and Supplemental Warning Information + Training/Certification Requirement*

- All registrants will be prohibited from the sale or distribution of paraquat products with labeling inconsistent with the Paraquat Dichloride Human Health Mitigation Decision as of **November 14, 2019**.
- 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.

Source: Paraquat Dichloride Human Health Mitigation Decision, December 15, 2016
(Amended January 12, 2017): EPA-HQ-OPP-2011-0855-0115

Timeline for EPA-required Paraquat Changes: *Closed-system Requirement*

- The exact timing of the closed-system requirement depends on the approval of paraquat products.
- **12 months from the label stamped date**, registrants will be prohibited from selling or distributing paraquat products not complying with the closed-system requirement.
- 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.

Source: Paraquat Dichloride Human Health Mitigation Decision, December 15, 2016
(Amended January 12, 2017): EPA-HQ-OPP-2011-0855-0115

Paraquat Label Changes

RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS ONLY- NOT TO BE USED BY UNCERTIFIED PERSONS WORKING UNDER THE SUPERVISION OF A CERTIFIED APPLICATOR.

- CORROSIVO PARA LA PIEL Y LOS OJOS.
- NUNCA TRANSFIERA ESTE PRODUCTO A RECIPIENTES PARA COMIDA O DE BEBIDAS O RECIPIENTES NO EXPLÍCITAMENTE PREVISTOS PARA PLAGUICIDAS.
- LEA LA ETIQUETA COMPLETA ANTES DE USAR ESTE PRODUCTO.
- EN CASO DE ACCIDENTE, BUSQUE ATENCIÓN MÉDICA INMEDIATA. LOS SÍNTOMAS SON PROLONGADOS, DOLOROSOS Y PUEDEN SER MORTALES.

- CORROSIVE TO SKIN AND EYES.
- NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES.
- READ ENTIRE LABEL PRIOR TO USING THIS PRODUCT.
- IN THE CASE OF AN ACCIDENT, SEEK IMMEDIATE MEDICAL ATTENTION. SYMPTOMS ARE PROLONGED, PAINFUL, AND CAN BE FATAL.

ATTENTION	ATENCIÓN
<ul style="list-style-type: none"> • DANGER – FATAL IF SWALLOWED OR INHALED. • CAUSES SEVERE EYE INJURY. • CORROSIVE TO SKIN. • NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES. • STORE TIGHTLY CLOSED IN ORIGINAL CONTAINER, AND IN A LOCKED PLACE AWAY FROM CHILDREN AND ANIMALS. • NEVER USE THIS PRODUCT IN RESIDENTIAL OR PUBLIC RECREATIONAL SETTINGS (E.G., HOMES, HOME GARDENS, SCHOOLS, RECREATIONAL PARKS, GOLF COURSES, AND/OR PLAYGROUNDS). • THIS PRODUCT IS TOXIC! AN ALERTING AGENT (ODOR) HAS BEEN ADDED TO HELP PREVENT ACCIDENTAL INGESTION. • SEE BACK OF PRODUCT CONTAINER FOR IMPORTANT SAFETY INFORMATION. 	<ul style="list-style-type: none"> • PELIGRO: MORTAL SI SE INGIERE O INHALA. • CAUSA LESIONES GRAVES EN LOS OJOS. • CORROSIVO PARA LA PIEL. • NUNCA TRANSFIERA ESTE PRODUCTO A RECIPIENTES PARA COMIDA O DE BEBIDAS O RECIPIENTES NO EXPLÍCITAMENTE PREVISTOS PARA PLAGUICIDAS. • GUARDE BIEN CERRADO EN EL ENVASE ORIGINAL Y EN UN LUGAR CERRADO LEJOS DE NIÑOS Y ANIMALES. • NUNCA USE ESTE PRODUCTO EN ÁREAS RESIDENCIALES O PÚBLICAS (COMO HOGARES, JARDINES, ESCUELAS, PARQUES RECREATIVOS, CAMPOS DE GOLF O SALONES DE JUEGOS). • ¡ESTE PRODUCTO ES TÓXICO! SE HA AGREGADO UN AGENTE DE ALERTA (OLOR) PARA AYUDAR A PREVENIR SU INGESTIÓN ACCIDENTAL. • LA PARTE POSTERIOR DEL ENVASE DEL PRODUCTO TIENE INFORMACIÓN DE SEGURIDAD IMPORTANTE.







CERTIFIED APPLICATOR TRAINING

Applicators must complete an EPA-approved paraquat training listed on the following website <https://www.epa.gov/pesticide-worker-safety/paraquat-dichloride-training-certified-applicators>. The training must be completed a minimum of every three years.

Source: Paraquat Dichloride Human Health Mitigation Decision, December 15, 2016 (Amended February 6, 2018)

Paraquat Supplemental Warning Materials

Product Package Safety Requirements

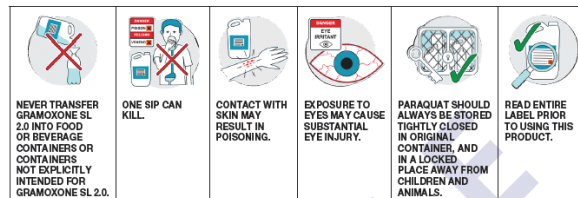
NEVER TRANSFER THIS PRODUCT INTO FOOD OR BEVERAGE CONTAINERS OR CONTAINERS NOT EXPLICITLY INTENDED FOR PESTICIDES.	NUNCA TRANSFERA ESTE PRODUCTO A RECIPIENTES PARA COMIDA O DE BEBIDAS O RECIPIENTES NO EXPLICITAMENTE PREVISTOS PARA PLAGUICIDAS	
ONE SIP CAN KILL.	UN SORBO PUEDE CAUSAR LA MUERTE.	
CONTACT WITH SKIN MAY RESULT IN POISONING.	EL CONTACTO CON LA PIEL PUEDE CAUSAR ENVENENAMIENTO.	
EXPOSURE TO EYES MAY CAUSE SUBSTANTIAL EYE INJURY.	EXPOSICIÓN A LOS OJOS PUEDE CAUSAR LESIONES SUSTANCIALES EN LOS OJOS.	
PARAQUAT SHOULD ALWAYS BE STORED TIGHTLY CLOSED IN ORIGINAL CONTAINER, AND IN A LOCKED PLACE AWAY FROM CHILDREN AND ANIMALS.	EL PARAQUAT DEBE ALMACENARSE SIEMPRE CERRADO EN SU RECIPIENTE ORIGINAL, Y EN UN LUGAR CERRADO, ALEJADO DE NIÑOS Y ANIMALES.	
READ ENTIRE LABEL PRIOR TO USING THIS PRODUCT.	LEA LA ETIQUETA COMPLETA ANTES DE USAR ESTE PRODUCTO.	



"Cap" Sticker

Gramoxone SL 2.0 contains the active ingredient paraquat dichloride (paraquat). People have died from accidentally drinking paraquat containing products that had been transferred into a beverage container, such as a water bottle or other drink bottle. It is also highly corrosive and can cause severe skin and eye damage including 3rd degree burns. Inhalation exposure may result in serious respiratory effects. FATAL if swallowed or inhaled.

Proper storage and handling



DISREGARDING LABEL DIRECTIONS IS A VIOLATION OF FEDERAL LAW AND IS PUNISHABLE AS SUCH.

Requirements for use

- TO PREVENT SEVERE INJURY OR DEATH, FOLLOW ALL LABEL REQUIREMENTS.
- TO BE USED BY CERTIFIED APPLICATORS ONLY - NOT TO BE USED BY NONCERTIFIED PERSONS WORKING UNDER THE SUPERVISION OF A CERTIFIED APPLICATOR.
- Applicators and other handlers (other than Mixers and Loaders) must wear long-sleeve shirt and long pants, shoes plus socks, protective eyewear, chemical-resistant gloves (made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils), and a Dust/Mist NIOSH-approved respirator with any N, R, P, or HE filter.
- Mixers and Loaders must wear long-sleeve shirt and long pants, shoes plus socks, chemical-resistant gloves (made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils), chemical-resistant apron, face shield, and a Dust/Mist NIOSH-approved respirator with any N, R, P, or HE filter.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove and wash contaminated clothing before wearing again.
- Discard clothing and other absorbent materials that have been drenched or heavily contaminated with paraquat. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washing PPE exists, use detergent and hot water.
- Keep and wash PPE separately from other laundry.
- Refer to the product label for more information.
- DO NOT mix this product with any pest control products other than those listed on the Gramoxone SL 2.0 label.
- Gramoxone SL 2.0 is compatible with the tank mix partners listed on this label.

First Aid

- If swallowed: **SPEED IS ESSENTIAL.** Immediate medical attention is required. Administer either activated charcoal (100g for adults or 25g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). **DO NOT USE SUPPLEMENTAL OXYGEN.** Call a poison control center or doctor **IMMEDIATELY** for treatment advice. Do not give anything by mouth to an unconscious person.
- If inhaled: Move person to fresh air. The odor of this product is from the alerting agent, which has been added, not from the paraquat. If person is not breathing, call 911 or an ambulance. Call a poison control center or doctor for further treatment advice.
- If in eyes: Hold eye open and rinse slowly and gently with clean water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- If on skin or clothing: Take off contaminated clothing. **IMMEDIATELY** wash the affected area with soap and water and rinse for 15-20 minutes. Prolonged contact will cause severe irritation. Contact with irritated skin or a cut or repeated contact with intact skin may result in poisoning. **GET MEDICAL ATTENTION.** Call a poison control center or doctor for treatment advice.
- Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

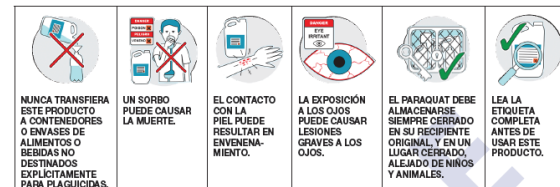
Please refer to the product label for further information.

For 24-hour medical emergency assistance (human or animal) or chemical emergency assistance (spill, leak, fire or accident) call 1-800-888-8372.

For non-emergency call 1-800-334-9481.

Gramoxone SL 2.0 contiene el ingrediente activo dicloruro de paraquat (paraquat). Hay personas que han muerto por beber accidentalmente productos que contienen paraquat que se habían transferido a un recipiente de bebidas, como una botella de agua u otra botella de bebida. También es altamente corrosivo y puede causar daños graves en la piel y los ojos, incluyendo quemaduras de tercer grado. La exposición por inhalación puede provocar efectos respiratorios graves. FATAL si se ingiere o inhala.

Almacenamiento y manejo adecuados



NO SEGUIR LAS INDICACIONES DE LA ETIQUETA REPRESENTA UNA INFRACCIÓN DE LA LEY FEDERAL Y ES PENADO COMO TAL.

Requisitos de uso

- PARA EVITAR LESIONES GRAVES O LA MUERTE, SIGA TODOS LOS REQUERIMIENTOS DE LA ETIQUETA.
- PARA SER UTILIZADO SOLO POR APLICADORES CERTIFICADOS: NO DEBE SER UTILIZADO POR PERSONAS NO CERTIFICADAS QUE TRABAJAN BAJO LA SUPERVISIÓN DE UN APLICADOR CERTIFICADO.
- Los aplicadores y otras personas que lo manipulen (que no sean mezcladores y cargadores) deben usar camisas de manga larga y pantalones largos, zapatos con calcetines, guantes resistentes a productos químicos (hechos de: barrera laminada, goma de butilo ≥ 14 milímetros de pulgada, goma de nitrilo ≥ 14 milímetros de pulgada, goma de neopreno ≥ 14 milímetros de pulgada, goma natural ≥ 14 milímetros de pulgada, polietileno, cloruro de polivinilo (PVC) ≥ 14 milímetros de pulgada o Viton® ≥ 14 milímetros de pulgada), y un respirador aprobado por NIOSH para polvo/neblina con cualquier filtro N, R, o P.
- Los mezcladores y cargadores deben utilizar camisas de manga larga y pantalones largos, zapatos con calcetines, guantes resistentes a productos químicos (hechos de: barrera laminada, goma de butilo ≥ 14 milímetros de pulgada, goma de nitrilo ≥ 14 milímetros de pulgada, goma de neopreno ≥ 14 milímetros de pulgada o Viton® ≥ 14 milímetros de pulgada), un delantal resistente a productos químicos, protector facial y un respirador aprobado por NIOSH para polvo/neblina con cualquier filtro N, R, P o HE.
- Quítase la ropa o equipo de protección personal inmediatamente si se impregna de pesticida. Luego lávese bien y póngase ropa limpia.
- Retire y lave la ropa contaminada antes de volver a usarla.
- Deséchela la ropa y otros materiales absorbentes empacados o fuertemente contaminados con paraquat. No los reutilice. Siga las instrucciones del fabricante para limpiar y mantener el EPP. Si no existen tales instrucciones para lavar el EPP, use detergente y agua caliente.
- Mantenga y lave el EPP por separado de la otra ropa.
- Consulte la etiqueta del producto para más información.
- NO mezcle en tanque este producto con ningún otro producto para el control de plagas que no esté incluido en la etiqueta Gramoxone SL 2.0. Gramoxone SL 2.0 es compatible con los socios de mezcla de tanque listados en esta etiqueta.

Primeros auxilios

- Si se ingiere: **LA RAPIDEZ ES ESENCIAL.** Se requiere atención médica inmediata. Administre carbón activado (100 g para adultos o 2 g/kg de peso corporal en niños) o Fuller's Earth (solución al 15 %, 1 litro para adultos o 15 ml/kg de peso corporal en niños). **NO USE OXÍGENO COMPLEMENTARIO.** Llame a un centro de control de envenenamiento o a un médico **INMEDIATAMENTE** para recibir asesoramiento sobre el tratamiento. No administre nada por vía oral a una persona inconsciente.
- Si se inhala: Mueva a la persona al aire fresco. El olor de este producto proviene del agente de alerta, que se ha agregado, no del paraquat. Si la persona no respira, llame al 911 o a una ambulancia. Para recibir instrucciones adicionales respecto al tratamiento a seguir, llame a un médico o a un centro de control de envenenamiento.
- Si entra en contacto con los ojos: Mantenga los ojos abiertos y enjuague lenta y suavemente con agua limpia durante 15-20 minutos. Si el afectado usa lentes de contacto, espere cinco minutos antes de retirarlos, continúe enjuagando el ojo. Llame a un médico o a un centro de control de envenenamiento para recibir instrucciones respecto al tratamiento a seguir.
- Si entra en contacto con la piel o la ropa: Quite la ropa contaminada. Lave **INMEDIATAMENTE** la zona afectada con agua y jabón y enjuague durante 15-20 minutos. El contacto prolongado causará irritación grave. El contacto con la piel irritada o un corte o contacto repetido con la piel intacta puede provocar intoxicación. **OBTENGA ATENCIÓN MÉDICA.** Llame a un médico o a un centro de control de envenenamiento para recibir instrucciones respecto al tratamiento a seguir.
- Tenga a la mano el envase del producto o su etiqueta cuando llame al centro de control de envenenamiento, al médico o al buscar tratamiento.

Consulte la etiqueta del producto para obtener más información.

Para asistencia de emergencia médica las 24 horas (humanos o animales) o asistencia de emergencia química (derrames, fugas, incendios o accidentes) llame al 1-800-888-8372.

Para casos que no son de emergencia llame al 1-800-334-9481.

SCP 1431A-L12 1118

Counter Card

Source: Paraquat Dichloride Human Health Mitigation Decision, December 15, 2016 (Amended January 12, 2017):

EPA-HQ-OPP-2011-0855-0115

Training and Certification Requirements

Two certifications will be required in order to use paraquat products:

1. A certified pesticide applicator's license/permit from your state or tribal authority
2. A paraquat-specific training certificate in your name

What is the deadline for paraquat users to become certified applicators and complete the paraquat-specific training?

Paraquat users need to become certified applicators and complete the paraquat-specific training *before using any paraquat product with the new label requirements.*

Paraquat Training Program

- The training program will be/is available in the new “Certified Applicator Training” section on all end-use paraquat product labels.
- A direct link to the training (www.usparaquattraining.com) is available on Syngenta’s website.
- Training must be successfully completed every three years.
- Remember, only certified applicators who successfully complete a required EPA-approved paraquat training program will be able to legally use paraquat products.
- Syngenta encourages paraquat users to take the paraquat-specific training as soon as possible, even if it is not required by the label of the paraquat product they are using.

Will paraquat training be available in Spanish?

Spanish versions of the paraquat training are in development - one in Puerto Rican Spanish and one in Mexican Spanish. However, the English version of the training is the only approved training available at this time.

How will records of pesticide certification and paraquat training be kept?

- Records for pesticide applicator's licenses and certificates will continue to be maintained by your state, county, or tribal authority.
- Records of paraquat-specific training will be maintained by the National Pesticide Safety Education Center (NPSEC) and also by the individual taking the training.
- Paraquat users should keep an electronic or paper copy of the certificate of completion for the paraquat-specific training.
- NPSEC will provide paraquat certificate information to state or tribal authorities *at their request*.

Will paraquat users be required to present their paraquat training certificates in order to purchase paraquat products?

No, paraquat users will only need to present their certified pesticide applicator's licenses/permits issued by their state or tribe in order to purchase paraquat products, just as they have been doing.

Future EPA Closed-System Requirement

- All non-bulk (less than 120 gallons), end-use paraquat products will be required to be sold in closed-system packaging that meets specific EPA guidelines.
- The closed-system packaging will not be required until 12 months after EPA stamps product labels with the requirement.
- *For most paraquat products*, the requirement is currently estimated to go into effect during the fall of 2020 (subject to change).