

2,4 D History

- 2,4-D is one of the oldest and most widely available herbicides in the world for broadleaf weed control
- Commercially available since 1945
- Produced by many chemical companies since the patent on it has long since expired
- It can be found in numerous commercial lawn herbicide mixtures, and is widely used as a weed killer on cereal crops, pastures, and orchards
- Over 1,500 herbicide products contain 2,4-D as an active ingredient.

- All 2,4 d pesticide products used in Texas must be registered with EPA and TDA
- Classified as a State Limited Use Pesticide under Section 76.003
- TDA based this on the fact that even when used in common practice, there should be additional restrictions to prevent unreasonable risk to man or the environment
- This takes into account many factors:
- Economic;
- Social;
- And environmental costs and benefits of use of the pesticide

2,4 d in Texas Agriculture Law

EXEMPTIONS

(4) A pesticide product containing an active ingredient listed in this subsection is exempt from classification as a state-limited-use pesticide or a regulated herbicide under this subsection if the product:

(Å) is distributed in a container with a capacity less than or equal to one quart for liquid products or less than or equal to two pounds for dry or solid products;

These are for homeowners for the most part, price keeps it difficult to justify use on a large scale



- (B) is a specialty fertilizer mixture labeled for ornamental use and registered as a commercial fertilizer under Chapter 63 of the Agriculture Code;
- (C) is ready for use, requires no further mixing or dilution before use, and is packaged in a container of one gallon or less for liquid products or four pounds or less for dry or solid products.

Homeowners



2,4 d in Texas Agriculture Law

- Also classified as a Regulated Herbicide under Section 76.141
- If used as directed and in accordance with widespread and commonly recognized practices. It was determined that the pesticide requires additional restrictions to prevent hazard to desirable vegetation caused by drift or an uncontrolled application
- Only applies to counties registered as Regulated Counties
- 54 out of 254 counties are Regulated Counties in Texas

• 3) Exceptions from Regulated Herbicide Classification.

(A) 2,4-dichlorophenoxyacetic acid (2,4-D) or 3,6-Dichloro-o-anisic acid dicamba when used in accordance with the approved product label for transgenic auxin herbicide tolerant crops; and

- (B) applied by ground application equipment only; and
- (C) applied when winds do not exceed 10 miles per hour.
- This regulation was created in response to crops with more technology becoming available and the threat of glyphosate resistant weeds looming in the immediate future for all agricultural crop producers

2,4 d in Texas Agriculture Law

- As a State Limited Use and Regulated Herbicide 2,4 D applicators and sellers must meet the following requirements
 - Applicator must have license to purchase and apply the product (testing and licensure)
 - Applicator must maintain application records for all applications of 2,4d
- Must maintain these records for 2 years from application date

- Seller must be licensed as a Dealer in Texas (Dealer's License)
- 2. Dealer license is required of out of state companies selling 2,4 D into Texas
- 3. Dealer must maintain distribution records of 2,4 D sales into Texas
- Out of state dealers must send in distribution records quarterly for review by TDA

2,4 d in Texas Agriculture Law

State-limited-use list

- (All herbicides except Compound 1080 and M44)
- 2,4-dichlorophenoxyacetic acid (2,4-D)
- 2,4-dichlorophenoxy butyric acid (2,4-DB)
- 2,4-dichlorophenoxy propionic acid (2,4-DP)
- 2-methyl-4-chlorophenoxyacetic acid (MCPA)
- 3,6-dichloro-o-anisic acid (dicamba)
- 3,4-dichloropropionanilide (propanil)
- 5-bromo-3-sec-butyl-6-methyluracil (bromacil)
- 2,4-bis(isopropylamino)-6-methoxy-s-triazine (prometon)
- 3,7-dichloro-8-quinolinecarboxylic acid (quinclorac)
- devices using the active ingredients sodium fluoroacetate (Compound 1080) and sodium cyanide (M44), in any quantity, for livestock predation

Regulated Herbicides

- 2,4-dichlorophenoxyacetic acid (2,4-D)
- 2-methyl-4-chlorophenoxyacetic acid (MCPA)
- 3,6-dichloro-o-anisic acid (dicamba)

• 3,7-dichloro-8-quinolinecarboxylic acid (quinclorac) When products containing these active ingredients are used in Regulated Counties, more restrictions are applied to the products

2,4 d in Texas Agriculture Law

Regulated Herbicide Counties:

The following counties shall be subject to the provisions of the Act, Subchapter G, unless specifically excepted by provisions of §7.53 of this title (relating to County Special Provisions): Aransas, Austin, Bailey, Baylor, Brazoria, Brazos, Briscoe, Burleson, Childress, Cochran, Collin, Collingsworth, Culberson, Dallas, Dawson, Deaf Smith, Delta, Dickens, Donley, El Paso, Falls, Foard, Fort Bend, Gaines, Galveston, Hall, Harris, Hardeman, Haskell, Hudspeth, Hunt, Jackson, King, Knox, Lamar, Lamb, Loving, McLennan, Martin, Matagorda, Midland, Milam, Moore, Motley, Parmer, Refugio, Robertson, Rockwall, Runnels, San Patricio, Waller, Ward, Wharton and Wilbarger.

- Special County Provisions Rule 7.51
- (a) The department shall not accept for adoption any request for special county provisions which will, except as provided by and consistent with the Act, Subchapter G, and regulations adopted thereunder, either directly or indirectly:
- (1) exempt applicators from obtaining spray permits, except during periods when susceptible vegetation is at a minimum;
- (2) exempt applicators from recordkeeping requirements;
- (3) exempt commercial applicators from requirements for proof of financial responsibility;
- (4) prohibit the distribution of any herbicide; and/or
- (5) require the department to inspect land prior to issuance of spray permits.

2,4 d in Texas Agriculture Law

- (b) The department may consider for adoption a request by a county to:
- (1) regulate or prohibit methods of application;
- (2) prohibit application of any regulated herbicide during any period of the year; and/or
- (3) exempt from the provisions of Subchapter G of the Code, any portion of a county which can be identified by easily recognizable physical boundaries.

(a) The following requirements for Regulated Herricide Applicators
 (a) The following requirements are applicable to persons applying regulated herbicides in regulated counties. No person shall apply regulated herbicides as defined in §7.30 of this title (relating to Classification of Pesticides), without first obtaining a spray permit for such application. A blanket permit may be issued to a licensed or certified applicator. The department may require a licensed or certified applicator who has obtained a blanket permit to submit a supplemental report of any regulated herbicide applied under the terms of the permit.

(1) All permits expire when the acreage for which the permit was granted has been sprayed, or 180 days after issuance, whichever occurs first.

(2) Applications of regulated herbicides by brush, mop, wick, basal treatment, or injection method are hereby exempt from the requirements of obtaining a permit.

(3) Applications by an applicator licensed by the Texas Structural Pest Control Board in turf and weed control and a nurseryman licensed by the department in turf weed control for structural pest control applications are exempt from the permit requirements of this section.

(4) All persons applying regulated herbicides to lawns are exempt from the permit requirements of this section.

2,4 d in Texas Agriculture Law

(b) All spraying of regulated herbicides must conform to these requirements in a regulated county regardless of whether or not a permit is required.

(1) Spraying high volatile herbicides is prohibited when there are susceptible crops within a four-mile radius from any point of the land to be sprayed. Highly volatile herbicides include methyl, ethyl, butyl, isopropyl, octylamyl, and pentyl esters containing various concentrations expressed in pounds of acid equivalent per gallon.

(2) No person shall spray regulated herbicides when the wind velocity exceeds 10 miles per hour or as specified on the product label, if the label is more restrictive.

(3) The use of any turbine or blower-type ground application equipment to apply regulated herbicides is prohibited.

- Enlist Duo (2,4D choline and glyphosate)
- Currently registered for use on GE (GeneticallyEngineered) corn and soybean crops in Arkansas, Illinois, Indiana, Iowa, Kansas, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, Ohio, South Dakota, and Wisconsin.
- This proposed decision would allow use on cotton in those states and extend use on GE corn, soybean and cotton crops to include Alabama, Arizona, Colorado, Delaware, Florida, Georgia, Kentucky, Maryland, Michigan, North Carolina, New Jersey, New Mexico, New York, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

WPS and the Grape Grower

• If you employ people to make pesticide applications and you use pesticides that have this box on the label you must comply with the Worker Protection Standard (WPS), the box states:

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard,40 CFR part 170. **Do not enter or allow worker entry into treated areas during the restrictedentry interval (REI) of XX hours.** PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and the involveds contact with anything that has been treated, such as plants, soil or water is:

COVERALLS WATERPROOF GLOVES SHOES PLUS SOCKS



Outline

- Background
- Overview of WPS Revisions
- Outreach and Implementation Plan

Background: Who is Covered by WPS?

Who is responsible for providing the protections?

- Agricultural employers on crop-producing establishments
- Commercial pesticide handling establishment employers

Who is protected?

- Farmworkers work in the fields to harvest and cultivate
- Pesticide handlers mix, load, and apply pesticides for use on crops
- Other persons during pesticide applications

Background: Scope

- The Agricultural Worker Protection Standard (WPS) was established to improve occupational protections for agricultural workers and pesticide handlers.
- Scope: Who is covered?
 - Approximately 890,000 agricultural establishments (farms, forests, nurseries, greenhouses) the rule exempts over 520,000 of these from most of the WPS provisions under the exemption for farm owners and immediate family members.
 - Approximately 45,000 commercial pesticide handling establishments (CPHEs). 1,936 CPHEs employ 14,120 handlers, the remaining CPHEs are self-employed handlers.
- No change in scope of rule with revisions
 No significant changes to excepted uses (i.e., livestock-related uses, post-harvest uses, lawn and ornamental uses, etc.)

Background: Relationship Between Pesticide Labeling & WPS

The labeling has product-specific requirements to protect workers and handlers

WPS has instructions on how to implement the requirements

WPS also has general protections too lengthy to place on every label, e.g., requirements for pesticide safety training, hazard communication materials, decontamination, and emergency assistance

Pesticide Labeling

- Length of the restricted entry interval (REI)
 - What PPE must be worn

WPS

- How to notify workers about the REI (oral or field posting)
- Providing, maintaining, and ensuring proper fit of PPE

Background: Goals of WPS

- Inform workers and handlers about potential exposure to pesticides
- Protect workers, handlers and other people from exposure to pesticide
- Mitigate any pesticide exposures that workers or handlers receive





Goals of the Revised WPS

- Improve occupational protections for agricultural workers and handlers to make them comparable to those for workers in other industries covered by OSHA
- Reduce acute occupational pesticide exposures and incidents
- Reorganize and streamline rule to make it easier to understand and follow
- Address concerns raised through years of stakeholder engagement through EPA's Federal Advisory Committee, the National Assessment process, and in meetings with regulatory partners

Public Comments

- Nearly 2,400 comments received
- Commenters
 - farmworker advocacy
 - pesticide manufacturers
 - grower group
 - applicators
 - state and tribal lead agencies
 - general public write in campaigns

Key Points Contained In Revisions

- Retained and expanded exemption for farm owners and immediate family members - over 520,000 agricultural establishments largely unaffected by most WPS provisions
- Delayed compliance dates to give farmers and States time to become familiar with new requirements and prepare for implementation
 - Compliance with most new requirements by Jan 2, 2017 Compliance with all requirements by Jan 1, 2018

Pesticide Safety Training

Current

- Pesticide safety training every 5 years
- Allow brief 5 point training prior to entering treated area and delay full pesticide safety training for up to 5 days ("grace period")

Revision

- Pesticide training every year
- Expand training content [Delayed implementation]
- Require recordkeeping of training for 2 years Provide worker or handler a copy upon request
- No "grace period"
- Keep certified applicators as trainers
- Train-the-trainer programs must be approved by EPA

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Notification

Current

- Oral or posted notification of outdoor treated areas labeling requires both
- Workers entering when restricted-entry interval (REI) effect (early-entry workers) must receive PPE

<u>Revision</u>

- Post outdoor treated areas when REI is greater than 48 hours
- Early-entry workers must be provided PPE & oral notification of:

 - information about the pesticide application
 specific task to be performed
 amount of time that the worker is allowed to remain in the treated area
 the PPE required by the label
 No recordkeeping of info provided to early-entry workers

Hazard Communication

Current

- Post application-specific information at central display until 30 days after REI expires
- Available to worker or handler only during display period

Revision

- Hazard information includes the application-specific information and the pesticide safety data sheets (SDSs)
- Post hazard information at central display for 30 days after REI expires and retain for 2 years
- Access available from display period through retention to:

 - Employee (upon oral or written request) Treating medical personnel and persons working under their supervision (oral or written request) Designated representative (written request only)

Pesticide Safety Information

Current

- Safety poster displayed at central location
- Certain safety information specified

Revision

Safety information displayed at central location and certain decontamination sites

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• Additional information required on display

Minimum Age for Handlers and Early-Entry Workers

<u>Current</u>

No minimum age

Revision

- Requires a minimum age of 18 for pesticide handlers and early entry workers (who enter field during restricted-entry interval (REI))
 - Members of owner's immediate family are exempt from this requirement
 - No minimum age in WPS for workers entering field after REI expires

Respirators

<u>Current</u>

Employers must provide Personal Protective Equipment (PPE) required by labeling & ensure respirator fits correctly

Revision

Adopts by reference a subset of OSHA's standard for respirators (including filtering facepieces) - fit test, medical evaluation, training



Exceptions to Personal Protective Equipment Requirements

<u>Current</u>

- Handlers can reduce PPE if a closed system is used. Current rule description requires "no pesticide escape"
- Handlers can reduce PPE when in an enclosed cab under certain conditions. Exception to wearing respirator allowed only if cab is certified by manufacturer to provide protection equivalent to the labeling-required respirator.

Revision

- Establishes a performance standard for closed systems modeled on CA proposal
- For enclosed cabs, maintain same exception for dermal PPE. Handlers in enclosed cabs must wear respirators identified on label, except for particulate filtering facepiece respirator (dust/mist filtering respirator) 35

Exceptions to Personal Protective Equipment Requirements

<u>Current</u>

- Crop advisors and their employees entering treated area during REI may wear early-entry PPE instead of handler PPE.
- Different than exemption from certain requirements for certified crop advisors and their employees

<u>Revision</u>

- Crop advisors and their employees entering treated area during REI may wear early-entry PPE or standard PPE instead of handler PPE.
 - Coveralls, shoes plus socks, gloves made of any waterproof material and (if required by label) eye protection



Application Exclusion Zones in Outdoor Production

<u>Revision</u>

- Establishes application exclusion zones (AEZ) based on distance from the application equipment for farms and forests, also applies in nurseries
- Agricultural employers must keep workers and other persons out of the treated area & AEZ that are WITHIN the boundary of the establishment owner's property
- Handler must suspend application if persons are in AEZ. Requirement to suspend application is NOT limited by the boundary of the establishment owner's property [Delayed implementation]



Decontamination Supplies

<u>Current</u>

 Employers must provide "sufficient amount of water so that the workers/handlers may wash thoroughly"

Revision

• Provide 1 gallon of water for each worker and 3 gallons for each handler and each early-entry worker; measured at the beginning of the work period

Decontamination Supplies

<u>Current</u>

 If handler is using a product that requires eye protection, one pint of water must be immediately available to each <u>handler</u>

Revision

- If handler is mixing/loading a product that requires eye protection, eyeflush water must be immediately available at the mix/load site for handler eye flushing
- If <u>applicator</u> is using a product that requires eye protection, one pint of water must be immediately available to each <u>applicator</u>

Emergency Assistance

<u>Current</u>

- Employers must provide "prompt" transportation to an emergency medical facility for workers or handlers who may have been exposed to pesticides
- Upon request, employers must provide certain information, if available, to the exposed person or medical personnel

<u>Revision</u>

- Retain "prompt" for provision of transportation
- Require employers to provide for each product the SDS and specific information about the product, as well as the circumstances of the application and exposure, to treating medical personnel

Definitions

- Added definitions to rule for the following terms:
 - Application exclusion zone, closed system, commercial pesticide handler employer, designated representative, employ, enclosed cab, enclosed space production, labor contractor, outdoor production, personal protective equipment, safety data sheet, use and worker housing area
- Revised the following key definitions:
 - Agricultural establishment, agricultural plant, handler, immediate family and worker
- Deleted the following definitions
 - Commercial production (proposed), entry-restricted area (proposed), farm, forest, forest operation (proposed), greenhouse and nursery

Definitions

Employ means to obtain, directly or through a labor contractor, the services of a person in exchange for a salary or wages, including piece-rate wages, without regard to who may pay or who may receive the salary or wages. It includes obtaining the services of a self-employed person, an independent contractor, or a person compensated by a third party, except that it does not include an agricultural employer obtaining the services of a handler through a commercial pesticide handler employer or a commercial pesticide handling establishment.

Definitions

 Immediate family is limited to the spouse, parents, stepparents, foster parents, father-in-law, mother-inlaw, children, stepchildren, foster children, sons-inlaw, daughters-in-law, grandparents, grandchildren, brothers, sisters, brothers-in-law, sisters-in-law, aunts, uncles, nieces, nephews, and first cousins.
 "First cousin" means the child of a parent's sibling, i.e., the child of an aunt or uncle.

Key Changes between Proposed and Revised Final Rule

Proposed rule

- Grace period for training: 2 days
- Certified applicator can't train workers
- Minimum age: 16
- Entry restricted area
- Eyewash water for handlers at permanent mixing loading sites
- Hazard communication: application information, product labels and SDS
- Central location eliminated for hazard communication
- Immediate family: add in-laws, grandparents & grandchildren
- Authorized representative identified orally or in writing; no requirements
- Equivalency granted on a case-by-case basis by policy

Revised rule

- Eliminate grace perio
- Certified applicator can train workers
- Minimum age: 18
- Application exclusion zone
- Eyewash water for handlers at all mix/load sites
- Hazard communication: application information and SDS
- Central location retained for hazard communication
- Immediate family: also add aunts, uncles, nephews, nieces & first cousins
- Designated representative identified in writing; other requirements
- Equivalency option for states and tribes

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No Major Changes between Proposed and Revised Final Rules

- Safety training annual
- Record keeping for safety training 2 years
- Expanded content in safety training
- Post treated areas with REI > 48 hours
- Oral notification for early-entry workers
- Respirator fit test, medical evaluation, training (same requirement; scope changed)



Implementation Timeline

Date	Milestone
September 28, 2015	Revised WPS final rule signed and announced.
November 2, 2015	Revised WPS final rule published in the Federal Register.
January 1, 2016	Revised WPS final rule becomes effective. [Compliance is required with <u>existing</u> WPS during 2016.]
January 2, 2017	Compliance is required with <u>most</u> of the <u>revised</u> WPS requirements.
January 1, 2018	 Compliance is required with <u>all</u> of the <u>revised</u> WPS requirements. Last three requirements: Cover new content in worker and handler training Include new content on pesticide safety information display Handlers suspend applications if anyone is in the application exclusion zone.

Outreach and Implementation

- Educate all stakeholders: webinars, presentations, training, state/tribe courses
- Educational resources: fact sheets, comparison tables, How to Comply Manual
- Enforcement resources: update inspector guidance; issue inspector pocket guidance; interpretive Q&As
 - WPS worker and training materials

Questions?

- Web Site for the complete WPS rule
- Go to Google or any search engine and type

EPA WPS

