

Pesticides near Schools~
WPS (*just some*) ~ More ??

Barbara Huecksteadt, Pesticide Program Manager
San Joaquin County Agricultural Commissioner's Office
November 9, 2017

Pesticide Use Near Schoolsites

...*Public K-12 schools and child day care facilities, collectively referred to as Schoolsites.*

2-PARTS

1. APPLICATION RESTRICTIONS

2. ANNUAL NOTIFICATION

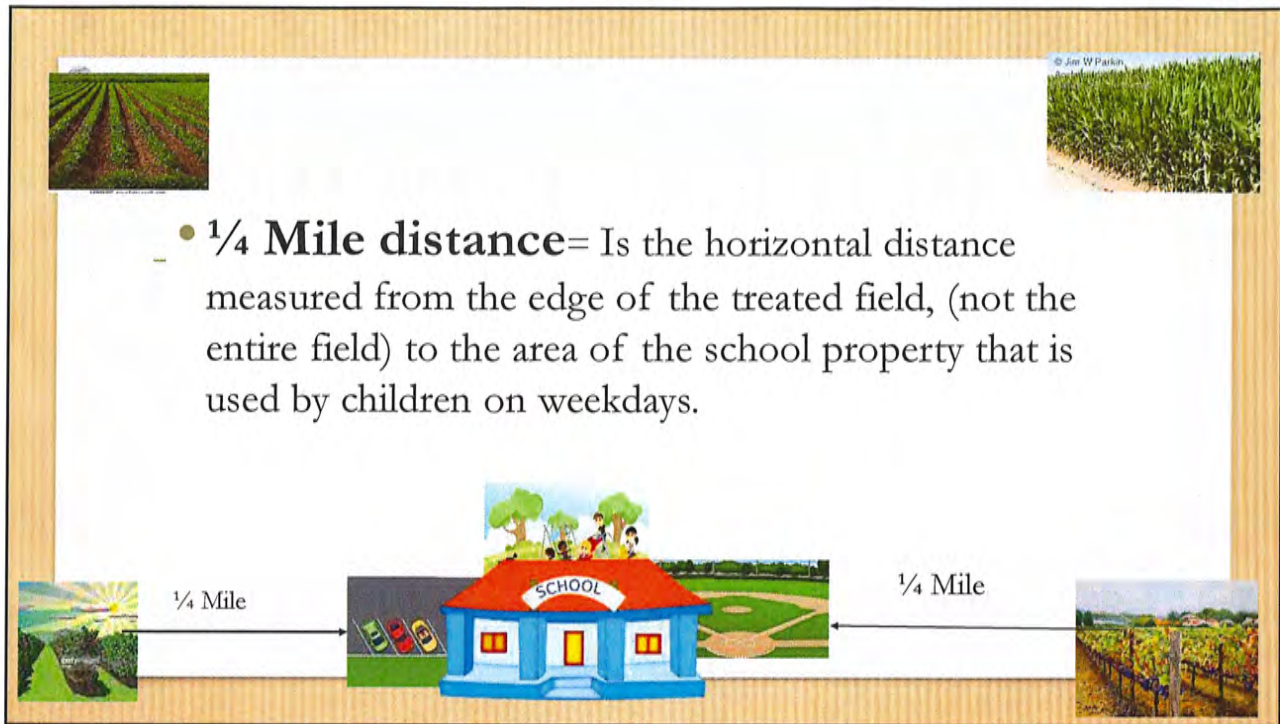
NO APPLICATION SPECIFIC NOTIFICATION

SCOPE of Regulations

- Pesticide Applications for **Production of an Agricultural Commodity** within ¼ Mile (1,320 feet) of a Schoolsite.
- **Restricted and Unrestricted Applications**
- Includes applications of **adjuvants**, FIFRA 25 (b) pesticides.
- Includes **applications to School Farms that Produce Ag. Commodities.**

• DOES NOT INCLUDE

- **Non-production Ag.** Applications i. e. Right of Way, parks, cemeteries, golf courses
- **Non-agricultural applications** i.e. home, industrial, structural, institutional, veterinarian and vector control.



The diagram shows a central school building with a red roof and blue walls, labeled "SCHOOL". To the left of the school is a field with rows of crops, and to the right is a field with rows of crops. Two arrows, each labeled "1/4 Mile", point from the school towards the fields, indicating the distance from the edge of the treated field to the school property. There are also two small inset images at the top: one on the left showing a field with rows of crops, and one on the right showing a field with rows of crops, with a small copyright notice "© Jim W Parkin" above it.

- **1/4 Mile distance**= Is the horizontal distance measured from the edge of the treated field, (not the entire field) to the area of the school property that is used by children on weekdays.

Definition of Pesticide

- As defined in Food and Agricultural Code section 12753, “pesticide” includes any of the following:
 - (a) *Any spray adjuvant.*
 - (b) *Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever. **Includes Insecticides, Herbicides, Fungicides, Bactericides, Miticides, Rodenticides***

- **Schoolsite** = Properties used by children on weekdays, containing **Public K-12 Schools** and licensed **Child Day Care Facilities** except Family Daycare Homes.
- Includes: buildings, playgrounds, athletic fields, parking lots, adjacent Community Parks if used for school activities i.e. PE, recess, sports.

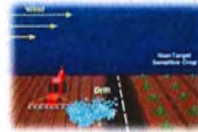


DOES
NOT
INCLUDE

- Vehicles or School Bus Stops outside of the property
- Night Games
- Private Schools
- Postsecondary Schools, Universities & Community Colleges
- For activities occurring out of the specified time period, the applicator is required to evaluate if any reasonable potential for contamination to people or property exists.

Application Restrictions

- Effective January 1st, 2018, restrictions will apply. Mon – Fri, From 6:00 am – 6:00 pm. A minimum distance should be kept between treated fields and schoolsites, and Schools and Day Care Facilities must be notified accordingly.
- Property Operator and applicator are responsible for ensuring compliance.
- Minimum distance between applications and schoolsites depends on application's drift potential:
 - 1/4 of mile for potentially higher drift
 - 25 feet for lower drift
 - No minimum distance for negligible applications



Minimum distance from application to schoolsite, Mon-Fri, 6:00 am – 6:00 pm

see next page for chart! →

Minimum distance from application to schoolsite, Mon-Fri, 6:00 am – 6:00 pm

Application Equipment Type	Minimum Distance			
	Dust	Fumigant	Granule	All Other Pesticides
Airblast Sprayer	1/4 Mile	Label Prohibits	No apps	1/4 Mile
Air Craft	1/4 Mile	Labels Prohibit	1/4 Mile	1/4 Mile
Backpack	1/4 Mile	Labels Prohibit	None	None
Bait Station	None	Labels Prohibit	None	None
Ground-Rig Sprayer	1/4 Mile	1/4 Mile	None	25 feet
Hand Pump Sprayer	1/4 Mile	1/4 Mile	None	None
Soil Injection	None	1/4 Mile	None	25 feet
Sprinkler Chemigation	No Apps	1/4 Mile	None	1/4 Mile
All Other Equipment	1/4 Mile	1/4 Mile	None	25 feet

Exemptions

- No minimum distance for non-fumigants applications in enclosed spaces i.e. Greenhouse, hoop houses, and similar spaces.
- No minimum distance when classes are not scheduled **for the entire day or the Day Care Facility is closed for the entire day.**
- **As an option to be exempt, a 3-party agreement may be reached to achieve same or greater level of protection as these regulations.**

What's a 3-party Agreement?

- An Agreement between:
 - Operator of the property
 - School Principal or Day Care Administrator.
 - Ag. Commissioner

The agreement must specify alternative application restrictions that the 3 parties agree on, to provide the same or a greater level of protection.

- It will remain in place till any of 3 Parties rescind.
- It will be enforced by Ag. Commissioner as if Regulation

Annual Notification



- **Responsible Party is the Property Operator.**
 - PCB may be allowed
 - An authorized Representative may notify on behalf of the Property Operator.
- **Timeline**
 - Notification must be provided by April 30 each year.
 - Notification must include a list of pesticides expected to be used during upcoming July 1 – June 30 period. New pesticide must be added to the list at least 48 hrs. prior the application.

Annual Notification


- Notification can be in writing: **paper templates will be available at the Ag. Offices**
- There will be an **electronic form through CALAGPERMITS.ORG**
- **Records must be kept for 2 years.**

Annual Notification Must Include

- Summary of regulation and required statements
- Map showing location of field(s) and schoolsite
- Operator of the property and Commissioner's contact info
- National Pesticide Information Center (NPIC) website
- List of Pesticides Expected to be Used July 1 – June 30
- Pesticides not in the list must be included at least 48 hrs. prior application. No emergency exceptions.

Required Statement

“This notification is informational only, and includes a list of pesticides expected to be used. Beginning July 2, 2018, schoolsite will be informed of pesticides not on the list at least 48 hours prior to their use. The County Agricultural Commissioner may be contacted for questions or additional information; if violations of these requirements are suspected; or other non-emergency situations.”



**ANNUAL NOTIFICATION
OF PESTICIDES USED NEAR SCHOOLS AND CHILD CARE CENTERS**

Westmorland Union Elementary School
 Attn: Nancy Johnson
 200 South C Street
 Westmorland, CA 92291
 n.johnson@wues.org

Date: 6/28/2017

Annual Notification

E-Template

This notification is informational only. California regulations require a farmer to provide annual notification of the pesticides expected to be applied to agricultural crops within 1/4 mile of a public K-12 school or a child care center (schoolsites). This notification pertains to **Gallo Vineyards Inc.** The pesticides listed are expected to be used during the July 1, 2017 – June 30, 2018 period. If a farmer needs to use a pesticide that is not included on the list, schoolsites will be informed at least 48 hours prior to use.

California regulations also prohibit pesticide applications to agricultural crops within the following distances of a schoolsite during Monday through Friday, from 6:00 a.m. to 6:00 p.m.

- Applications with potentially higher drift are prohibited within 1/4 mile (1,320 feet) of a schoolsite, such as fumigations and applications using aircraft.
- Applications with lower drift are prohibited within 25 feet of a schoolsite, such as most applications using a tractor.
- Applications with negligible drift have no distance requirement, such as applications using a hand sprayer or within a greenhouse.

For additional information of this regulation visit: www.cdpr.ca.gov/XXXXXX

Farmer contact information:

Operator ID: 3900007	Address: 14000 S WING LEVEL RD	
Operator: NAME GALLO VINEYARDS INC		
Name: ADDRESS	City: STOCKTON	State: CA
Email: EMAIL gallo.vineyards@wine.com	Zip: 95206	

List of pesticides expected to be used

- Active ingredient or
- Principal Functioning Agent for adjuvants
- Pesticide Product's Name
- EPA Reg. No.

➤ The list must include Adjuvants and FIFRA 25 (b) pesticides.

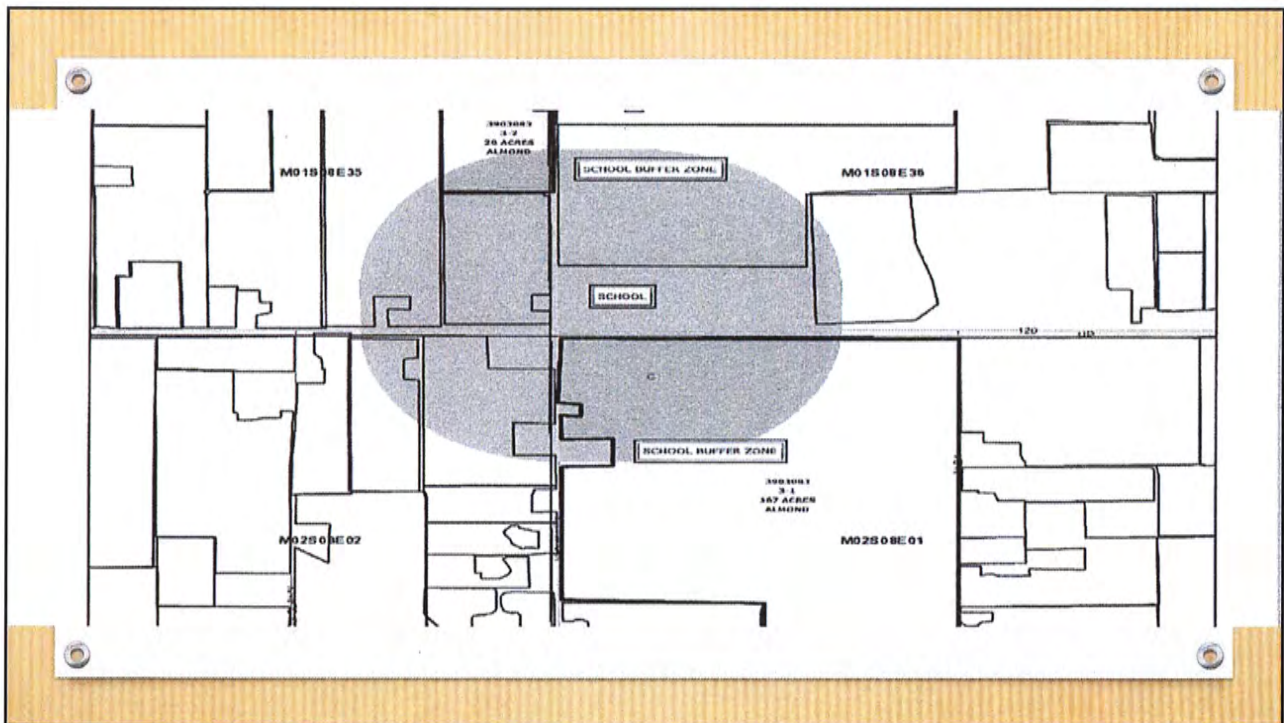
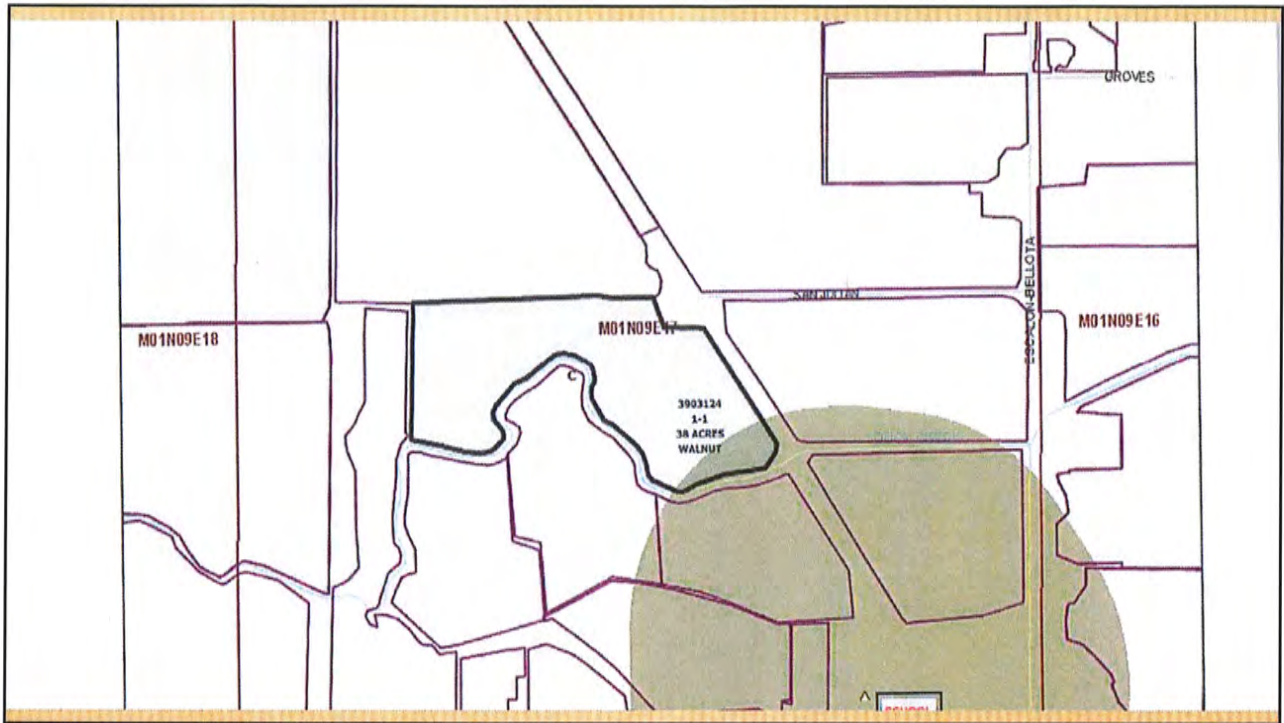
➤ FIFRA 25 (b) are pesticides exempted from EPA and Cal EPA registration requirements i.e. Pheromones, Castor Oil, Cinnamon oil, Citronella etc.

New Property Operator

- Must provide his first notification within 30 days of assuming control of property. Notification must be provided at least 48 hours prior to use of pesticides.
- It must include list of expected pesticides to be used from the time notification is provided to June 30 of the following year. Examples:
 - 12/30/2018 List covers ➡ 1/1/2019 ↔ 6/30/2019
 - ↑
 - Notification Given:
 - ↓
 - 1/2/2019 List covers ➡ 1/4/2019 ↔ 6/30/2020


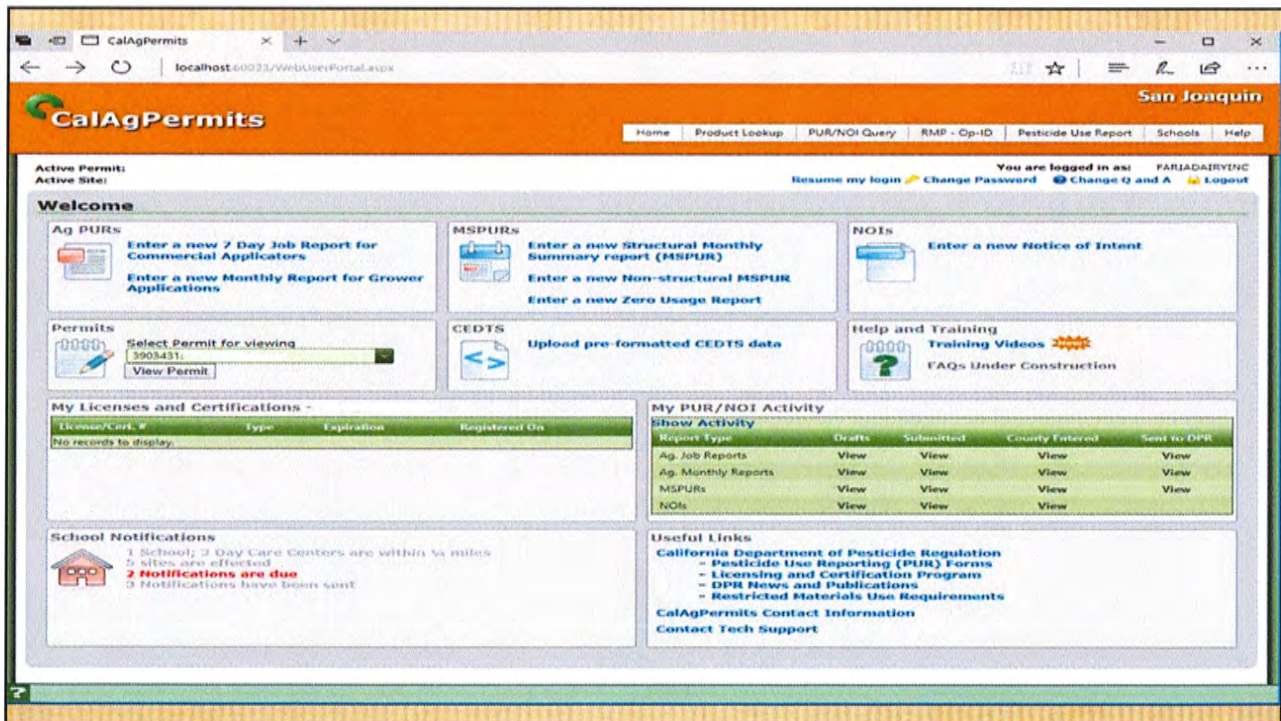
San Joaquin County permitting procedures considering new regulations.

- Call your Corresponding Ag Office (Stockton, Ripon, Lodi) to discuss with a Biologist about pesticide application around Schools if you have specific question about your fields.
- Your permit maps will show Buffer Zones if you farm within a similar distance of a school.
- If you know you have or will have fields near of a school start preparing with the necessary information to notify the parties.




San Joaquin County Schools

Districts	Number of Sites	Number of Permittees
A Manteca & Lathrop	237	50
B Ripon & Manteca	127	51
C Escalon & Farmington	76	24
D Stockton & Linden	116	34
E Lodi	137	40
F Woodbridge, Lockeford	57	21
G Thornton	26	19
H Stockton	331	45
I Stockton & French Camp, Mountain House	114	14

The screenshot shows the CalAgPermits web portal. At the top, there is a navigation menu with links for Home, Product Lookup, PUR/NOI Query, RMP - Op-ID, Pesticide Use Report, Schools, and Help. The user is logged in as PARIADARYINC. The main content area is divided into several sections:

- Welcome:** Contains quick links for Ag PURs (7 Day Job Report, Monthly Report for Grower Applications), MSPURs (Structural Monthly Summary report, Non-structural MSPUR, Zero Usage Report), NOIs (Notice of Intent), Permits (Select Permit for viewing, View Permit), CEDTS (Upload pre-formatted CEDTS data), and Help and Training (Training Videos, FAQs Under Construction).
- My Licenses and Certifications:** A table with columns for License/Cert. #, Type, Expiration, and Registered On. It currently shows "No records to display."
- My PUR/NOI Activity:** A table with columns for Report Type, Drafts, Submitted, County Entered, and Sent to DPR. It lists Ag. Job Reports, Ag. Monthly Reports, MSPURs, and NOIs.
- School Notifications:** A section with a house icon and text: "1 School; 2 Day Care Centers are within 1/4 miles; 2 offices are affected; 2 Notifications are due; 3 Notifications have been sent."
- Useful Links:** A list of links including California Department of Pesticide Regulation, Pesticide Use Reporting (PUR) Forms, Licensing and Certification Program, DPR News and Publications, Restricted Materials Use Requirements, CalAgPermits Contact Information, and Contact Tech Support.



CA
SchoolNotify.ORG

**ANNUAL NOTIFICATION
OF PESTICIDES USED NEAR SCHOOLS AND CHILD CARE CENTERS**

Westmorland Union Elementary School Date: 6/28/2017
 Attn: Nancy Johnson
 200 South C Street
 Westmorland, CA 95281
 n.johnson@wueis.org

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Operator: GALLO VINEYARDS INC	
Name: SILVEIRA,JOE A	City: STOCKTON
Email: gallo.vineyards@wne.com	State: CA
	Zip: 95206



AEZ ~ Application Exclusion Zone

- **Current Definition (2017): Set to be deleted 1/1/18**
 - The area surrounding the application equipment that must be **free of all persons** other than appropriately trained and equipped handlers during pesticide applications.
 - This old definition included areas outside of a grower's own fields
- Remaining regulation applies to **fieldworker in the grower's field**: "No employer will direct or allow any person (other than applicators) to enter or remain in the application exclusion zone."
- This regulation does not assure compliance of current drift regulations (CCR 6614 Protection of Persons, Animals and Property).-*This covers all surrounding environments.*

AEZ for Outdoor Production

- **AEZ = 100 ft** when applying pesticides aerially; air blast; as a fumigant, smoke, mist, or fog; or as a fine spray (sulfur is considered air blast)
- **AEZ = 25 ft** when not using the above application methods and pesticide is sprayed from a height greater than 12 inches from soil or planting medium using no smaller than a medium spray
- **No AEZ** if the pesticide is applied using any other method than those described above
- Indoor production- different requirements



ASABE S572.1 Droplet Size Classification

The American Society of Agricultural and Biological Engineers (ASABE) developed the ASABE S572.1 standard to measure and categorize spray quality from: 1998

Spray Quality ¹	Size of Droplets	VMD Range (micrometers)	Color Code	Retention ² (minutes for 50% Evaporation)	Used for	EMD ³ Potential
Extremely Fine	Small	8.1-108	Blue	Excellent	Resistant to High Drift	High
Very Fine		108-216	Orange	Very Good	Good Control	
Fine		216-324	Yellow	Good	Good Control	
Medium		324-432	Green	Good	Good Control	
Coarse		432-540	Black	Moderate	Good Control	
Very Coarse		540-1080	Black	Poor	Good Control	
Extremely Coarse		1080-2160	Black	Very Poor	Liquid Particles	Low
Ultra Coarse		2160-4320	Black	Very Poor	Liquid Particles	Low

¹ Values within small circles
² Values within small circles
³ Values within small circles

ASABE S572.1 standard uses eight droplet classification categories, six of which are common for agriculture and horticulture.

Very Fine

Fine

Medium

Coarse

Very Coarse

Extremely Coarse

Most agricultural applications recommend a fine, medium, or coarse spray.
 Sprays provide excellent coverage for: droplet spraying of the target including:
 - Foliar and soil insecticides
 - Fertilizers
 - Plant growth regulators
 - Plant disease fungicides and herbicides


Values are the total number of droplets per cubic foot.
 Values are based on total droplet volume of spray (VMD & VSD).
 Values are based on:
 - Droplet volume
 - Droplet number
 - Droplet size


A. Laboratory Droplet Size
 VMD is the droplet size at which 50% of the spray volume is in droplets larger than the VMD and 50% of the volume is in droplets smaller than the VMD. (Adapted from Matheson, 1997)

Category of Droplet Size	Volume (micrometers)	Retention (minutes)	Retention (minutes)	Retention (minutes)
Very Fine	8.1-108	Excellent	Very Good	Good
Fine	108-216	Very Good	Good	Moderate
Medium	216-324	Good	Moderate	Poor
Coarse	324-432	Good	Moderate	Poor
Very Coarse	432-540	Good	Moderate	Poor
Extremely Coarse	540-1080	Very Poor	Liquid Particles	Low
Ultra Coarse	1080-2160	Very Poor	Liquid Particles	Low


- INFORMATION ON SPRAY SIZE DEFINITIONS:
- American Society of Agricultural Biological Engineers (ASABE) S572.1

Scenario





100 ft



FIELD POSTING

When are field postings required?

- When the label requires it
- **Any REI greater than 48 hrs as specified on the product label ****
 - **Changed from 1/1/2017**



ADJUSTED REI's ~ SULFUR

- *GRAPES, May 15 through Harvest:*

The restricted entry interval (REI) for Sulfur remains 3 Days when applied in the San Joaquin Valley counties.

What should be on the signs?



- Skull and Crossbones



- DANGER, PELIGRO
- PESTICIDES, PESTICIDAS
- KEEP OUT, NO ENTRE



When can I put signs up? When must I take signs down?

- Up:
 - Before application starts
 - Not more than 24 hrs prior to start
- Down:
 - After REI expires
 - Not more than 3 days after REI expires
- WHY?



DECONTAMINATION SUPPLIES: Specifically WATER

PREVIOUS RULES (Fieldworkers & Handlers):

soap

SUFFICIENT WATER

single use towels

1 pair coveralls (for pesticide handlers)

Decontamination for Eyes (Handlers only):

Previously:

- If labels require protective eyewear then:

Each handler must have **1 pint water** on them for emergency eye flushing (STILL APPLIES!)



Currently: Sufficient water defined as at least

- 1 Gallon of WATER per Worker (Field Workers)
- 3 Gallons of WATER per Handler (Pesticide Handlers)
- **AT THE BEGINNING OF EACH WORK PERIOD FOR ROUTINE AND EMERGENCY DECONTAMINATION**

Can the water be on the tractor?





Decontamination for Eyes (Handlers only):

Currently: For labels requiring eyewear *or* when using a closed mixing system:

- AT MIXING & LOADING SITE: eyewash system capable of delivering running water at 0.4 gal/min for 15 minutes **or** 6 gal of water in suitable containers delivering a gentle eye-flush for 15 minutes

WHICH OF THESE ARE EYEWASH STATIONS?



Application-Specific Information

- Display at a central location
 - This location needs to be described in the PSIS A-9 and A-8/N-8
- For Fieldworkers: Must be displayed once application is completed and before fieldworkers are allowed to enter the treated field
- For Handlers: Must be displayed within 24 hrs of application completion
- Need to remain displayed until area is no longer a “treated field” (or workers/handlers will no longer be on the operator’s property, whichever occurs earlier)
- **Must be retained for two years**

Application-Specific Information for Fieldworkers and Pesticide Handlers

- Must include the following information:
 - **Crop or site treated** and ID of the treated area
 - **Date(s) and time(s)** treated including **start and end times**
 - REI-Restricted Entry Interval
 - Product name, Registration numbers, and Active Ingredients
 - **SDSs (Safety Data Sheets)** for applied pesticides



Quiz: I want to use my recommendation or pesticide use report for my App Spec Info.
What other information do I need to include?

- Crop or site treated and ID of the treated area
- Date(s) and time(s) treated including start and end times
- REI-Restricted Entry Interval
- Product name, Registration numbers, and Active Ingredients
- SDSs (Safety Data Sheets) for applied pesticides

A FEW MORE THINGS...

- Minimum age requirement of 18 years for employees
- Enclosed cab: Defined as chemical resistant barrier, completely surrounding occupant of cab and prevents dermal contact with pesticides being applied outside of cab.
 - Work clothing may be worn instead of PPE
 - Filtering face piece respirator (NIOSH prefix TC-84A) or dust/mist filtering respirator is required by label: no respirator required to be worn inside the cab
- Licensing & Certification: Changes expected that may add more hours and/or specific hours related to licensing category.
- Pest Control Advisor Employee Changes:
 - Exceptions that extend to PCA's no longer extend to their employees as well.
 - Now all PCA's employees must meet requirements for fieldworkers and/or early entry workers.