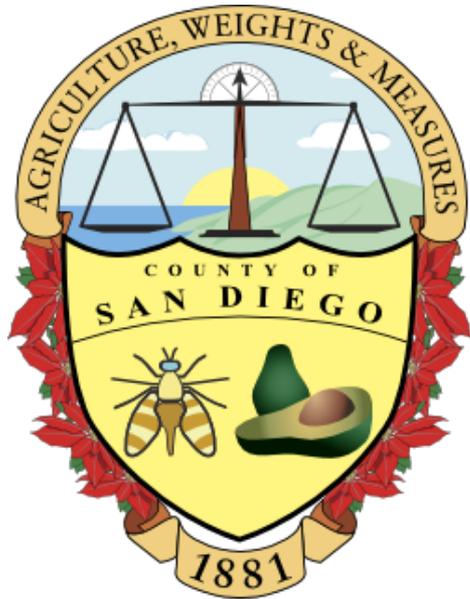


# 2019 Fieldworker Training



Department of Agriculture,  
Weights & Measures  
County of San Diego

Tim Hewitt & Ben Redding  
Agricultural/Standards  
Inspectors

Pesticide Regulation Program

March 21, 2019

# Topics to be covered:

- ▶ **Definitions**
  - ▶ Pesticide
  - ▶ Fieldworker
  - ▶ Treated Field
  - ▶ Restricted Entry Interval (REI)
- ▶ **Training Requirements**
  - ▶ Hazard Communication
  - ▶ Safety Data Sheet
  - ▶ Application Specific Information (ASI)
  - ▶ Emergency Medical Care
  - ▶ Decontamination Facilities
  - ▶ Notification
  - ▶ Application Exclusion Zone (AEZ)
  - ▶ Early Entry Requirements
  - ▶ Pesticide Exposure
  - ▶ Heat-related Illness
  - ▶ Employee Rights
  - ▶ Resources

# Pesticides

- ▶ (a) Any substance used for
  - ▶ defoliating plants
  - ▶ regulating plant growth
  - ▶ preventing, destroying, repelling, or mitigating any pests
- ▶ (b) Adjuvants
  - ▶ spreader/stickers



# Who is a Fieldworker?

- ▶ Any person who performs activities in a field and/or a greenhouse such as:
  - ▶ harvesting
  - ▶ pruning
  - ▶ irrigating
  - ▶ fertilizing
  - ▶ transplanting



# Fieldworkers and pesticides

- ▶ Fieldworkers **CANNOT** handle pesticides unless they have been trained as pesticide handlers



COUNTY OF SAN DIEGO  
DEPARTMENT OF AGRICULTURE, WEIGHTS AND MEASURES  
PESTICIDE REGULATION PROGRAM

## WRITTEN TRAINING PROGRAM FOR PESTICIDE HANDLERS

Employees handling pesticides must be trained as required in Title III of the California Code of Regulations Section 6724. The following information will guide you in developing your written training program. This information is NOT comprehensive and additional information will be needed. Information in *italics* are suggestions of other sources of information.

- ▶ Training shall be:
  - In a manner the employee understands;
  - Be conducted pursuant to the written training program;
  - Include response to questions;
  - Completed before the employee is allowed to handle pesticides;
  - Continually updated to cover any new pesticides that will be handled; and
  - Repeated at least annually thereafter.

The requirements for training are as follows:

Section 6724 (a) Handler Training :

- (a) The employer shall have a written training program. The training program shall describe the materials (e.g., study guides, pamphlets, pesticide product labeling, Pesticide Safety Information Series leaflets, Material Safety Data sheets, slides, video tapes) and information that will be provided and used to train his or her employees and identify the person or firm that will provide the training. The training program shall address each of the subjects specified in subsection (b) that is applicable to the specific pesticide handling situation. The employer shall maintain a copy of the training program while in use and for two years after use, at a central location at the work place.

*(Print name of person or firm that will provide training)*

California Code of Regulations Section 6724(b):

The handler training shall cover, for each pesticide or chemically similar group of pesticides, to be used:

Please note: To help you determine chemically similar groups, refer to EPA publication, *Recognition and Management of Pesticide Poisonings*.

- (1) Format and meaning of information, such as precautionary statements about human health hazards (*pesticide product labeling, Pesticide Safety Series Information A-1*)
- (2) Hazards of pesticides, including acute and chronic effects, delayed effects, and sensitization (*pesticide product labeling, Material Safety Data Sheets, or Pesticide Safety Information Series leaflets*).

# Treated Field/Area

- ▶ Any field or area that has been treated with pesticides
- ▶ Considered 'treated' for 30 days after the Restricted Entry Interval expires



# Restricted Entry Interval (REI)

- ▶ Period of time after a field/area is treated with a pesticide during which entry is restricted
  - ▶ REI protects persons from exposure to hazardous levels of residues
  - ▶ Pesticide label identifies the REI (e.g. 4 hrs., 12 hrs., 24 hrs.)

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves – EPA chemical-resistance category B (e.g., barrier laminate or butyl rubber ≥14 mils)
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

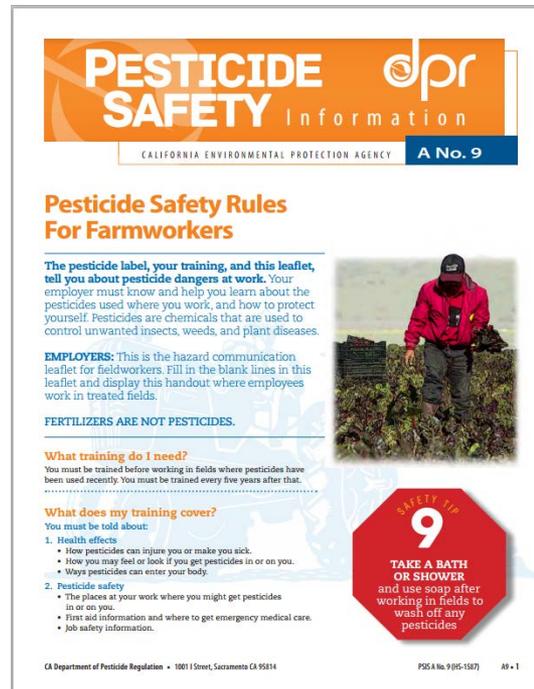
# Fieldworker Training Requirements

- ▶ Trained before beginning work in treated fields/areas
- ▶ Trained annually
- ▶ In a manner the employee understands
- ▶ By a qualified trainer



# Hazard Communication

- ▶ Completed Pesticide Safety Information Series A No.9 displayed at the worksite
  - ▶ Identifies where pesticide use records and Safety Data Sheets (SDS) are kept
  - ▶ Identifies Emergency Medical Care facility location



The image shows a leaflet titled "PESTICIDE SAFETY Information" with the "dpr" logo. Below the title, it says "CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY A No. 9". The main heading is "Pesticide Safety Rules For Farmworkers". The leaflet contains several sections of text and a photograph of a farmworker. A red octagonal "SAFETY TIP" sign is overlaid on the bottom right of the leaflet, with the number "9" and the text "TAKE A BATH OR SHOWER and use soap after working in fields to wash off any pesticides." The bottom of the leaflet includes the address "CA Department of Pesticide Regulation • 1001 I Street, Sacramento CA 95814" and the code "PSIA No. 9 (05-1587) A9 • 1".

**PESTICIDE SAFETY** Information **dpr**

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY **A No. 9**

### Pesticide Safety Rules For Farmworkers

**The pesticide label, your training, and this leaflet, tell you about pesticide dangers at work.** Your employer must know and help you learn about the pesticides used where you work, and how to protect yourself. Pesticides are chemicals that are used to control unwanted insects, weeds, and plant diseases.

**EMPLOYERS:** This is the hazard communication leaflet for fieldworkers. Fill in the blank lines in this leaflet and display this handout where employees work in treated fields.

**FERTILIZERS ARE NOT PESTICIDES.**

**What training do I need?**  
You must be trained before working in fields where pesticides have been used recently. You must be trained every five years after that.

**What does my training cover?**  
You must be told about:

1. Health effects
  - How pesticides can injure you or make you sick.
  - How you may feel or look if you get pesticides in or on you.
  - Ways pesticides can enter your body.
2. Pesticide safety
  - The places at your work where you might get pesticides in or on you.
  - First aid information and where to get emergency medical care.
  - Job safety information.

**SAFETY TIP**  
**9**  
TAKE A BATH OR SHOWER and use soap after working in fields to wash off any pesticides.

CA Department of Pesticide Regulation • 1001 I Street, Sacramento CA 95814 PSIA No. 9 (05-1587) A9 • 1

# Safety Data Sheets

- ▶ Hazards
  - ▶ e.g. "Harmful if inhaled"
- ▶ Safety Precautions
- ▶ Emergency First Aid
  - ▶ e.g. "Rinse skin immediately with plenty of water for 15- 20 minutes"

MONSANTO COMPANY  
Roundup PROMAX® Herbicide

Page: 1 / 10  
Version: 2.0  
Effective date: 10/15/2015

**MONSANTO COMPANY**  
Safety Data Sheet  
Commercial Product

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**1.1. Product identifier**

**Roundup PROMAX® Herbicide**

**1.1.1. Chemical name**  
Not applicable.

**1.1.2. Synonyms**  
None.

**1.1.3. EPA Reg. No.**  
524-579

**1.2. Product use**  
Herbicide

**1.3. Company**  
MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167  
**Telephone:** 800-332-3111, **Fax:** 314-694-5557  
**E-mail:** safety.datasheet@monsanto.com

**1.4. Emergency numbers**  
FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands. For calls originating elsewhere: 703-527-3887 (collect calls accepted).  
FOR MEDICAL EMERGENCY - Day or Night: +1 (314) 694-4000 (collect calls accepted).

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**2. HAZARDS IDENTIFICATION**

**2.1. Classification**  
OSHA Hazard Communication Standard, 29 CFR 1910.1200 (2012)  
Acute toxicity, inhalation - Category 4

**2.2. Label elements**

**2.2.1. Signal word**  
WARNING!

**2.2.2. Hazard pictogram/pictograms**



**2.2.3. Hazard statement/statements**  
Harmful if inhaled.

**2.2.4. Precautionary statement/statements**  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Use only outdoors or in a well-ventilated area.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.

# Application Specific Information

- ▶ Must be displayed at a central location by the employer and contain pesticide application information
  - ▶ Treated Area
  - ▶ Application Date/Time
  - ▶ REI
  - ▶ Name of the product
  - ▶ Active ingredient(s)
  - ▶ EPA registration number

APPLICATION-SPECIFIC INFORMATION  
INFORMACION ESPECIFICA SOBRE APLICACIONES

- Complete and display\* within 24 hours of the completion of an application
- Display until the area treated no longer meets the definition of a Treated Field\*\*

TREATED AREA AREA TRATADA	DATE/TIME OF APPLICATION FECHA Y HORA DE APLICACION	RESTRICTED ENTRY INTERVAL TIEMPO DE ENTRADA PROHIBIDA	PRODUCT NAME NOMBRE DEL PRODUCTO	ACTIVE INGREDIENT SUSTANCIA ACTIVA	EPA REGISTRATION NUMBER NO. DE REGISTRO EPA
EXAMPLE (For example) Sections 1, 3 Bogonias	1/1/98 2:30 - 4:30PM	48 hours	Excite DF	Copper Hydroxide	1812-334
SECTION 2	2-20-07/7:00 AM	12 HOURS	EAGLE		62719-417
SECTION 3	2-22-07/7:30 AM	24 HOURS	CHIRCO		42A-889
SECTION 4	2-28-07/8:00 AM	12 HOURS	SUPDUE MAX		100-619
SECTIONS 5-6	4-2-07/7:00 AM	1 WEEKS	ROUNDUP PRO		154-475
SECTION 7	4-25-07/8:00 AM	12 HOURS	TALSTAR		279-2106
SECTIONS 7-8	4-26-07/9:00 AM	4 HOURS	GLYRS X-TRA		4781-25

\* DISPLAY means to make information available to the employee so that he or she may readily see and read the document, during normal business hours, without having to make a specific request of any person.

\*\* TREATED FIELD means a field that has been treated with a pesticide or had a restricted entry interval in effect within the last 30 days. A treated field includes roads, paths, ditches, borders, and headlands if the pesticide was directed to those areas.

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# Emergency Medical Care

- ▶ Arranged in advance by your employer
- ▶ Be knowledgeable of:
  - ▶ Medical facility name and location
- ▶ On the job illness caused by pesticide exposure:
  - ▶ Employer must provide transportation to medical facility
- ▶ Report pesticide-related illness
- ▶ Worker's compensation claims may be filed for work-related injury/illness *including pesticide exposure*



# Decontamination Facilities

Employers must provide:

- ▶ Sufficient Water
  - ▶ 1 gallon for each worker and 3 gallons for each early entry worker at beginning of work period
- ▶ Soap
- ▶ Single use towels
- ▶ Must be within a 1/4 mile or nearest point of vehicle access



# Notification

- ▶ Employers must provide notification to fieldworkers (or anyone) who is likely to enter or work within  $\frac{1}{4}$  mile of a pesticide application
- ▶ Verbally/Posting



# Field Posting

- ▶ Outdoor applications: required when REI is more than 48 hours, or if required by the label
- ▶ Enclosed space applications (including greenhouses): required when REI is more than 4 hours, or if required by the label



# During Pesticide Applications

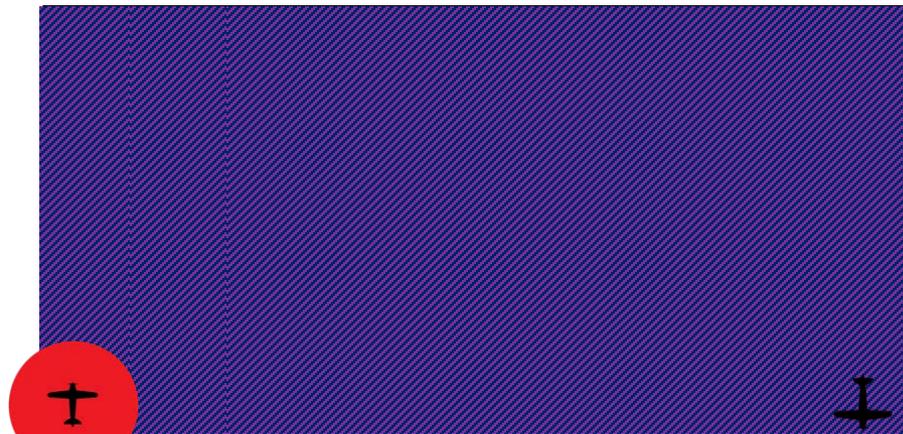
- ▶ Do not enter or remain in the area during an application
- ▶ Only the trained and equipped pesticide applicator can stay in the area



# Application Exclusion Zone (AEZ)

- ▶ Area surrounding the application equipment during the application
- ▶ As application equipment moves, the AEZ moves with it
  - ▶ Outdoor applications
    - ▶ e.g. aerial sprays AEZ = 100 ft
    - ▶ e.g. ground boom sprays AEZ = 25 ft
  - ▶ Indoor applications
    - ▶ AEZ distance varies

# Application Exclusion Zone (cont.)



When the application is concluded, the AEZ no longer exists.



Field



AEZ



Treated  
Area

# Early Entry Workers

- ▶ Workers entering a treated field/area before the REI has expired
  - ▶ Early entry workers must be at least 18 years old
  - ▶ Must use the Personal Protective Equipment (PPE) established on the label

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- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves – EPA chemical-resistance category B (e.g., barrier laminate or butyl rubber ≥14 mils)
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

# Early Entry Workers (cont.)

Employer must provide:

- ▶ Date and Time the REI begins and ends
- ▶ Product labeling precautionary statements related to human hazards
- ▶ Information about symptoms of poisoning
- ▶ Information about emergency First Aid and Decontamination Procedures including emergency eye flushing techniques

## AGRICULTURAL USE REQUIREMENTS

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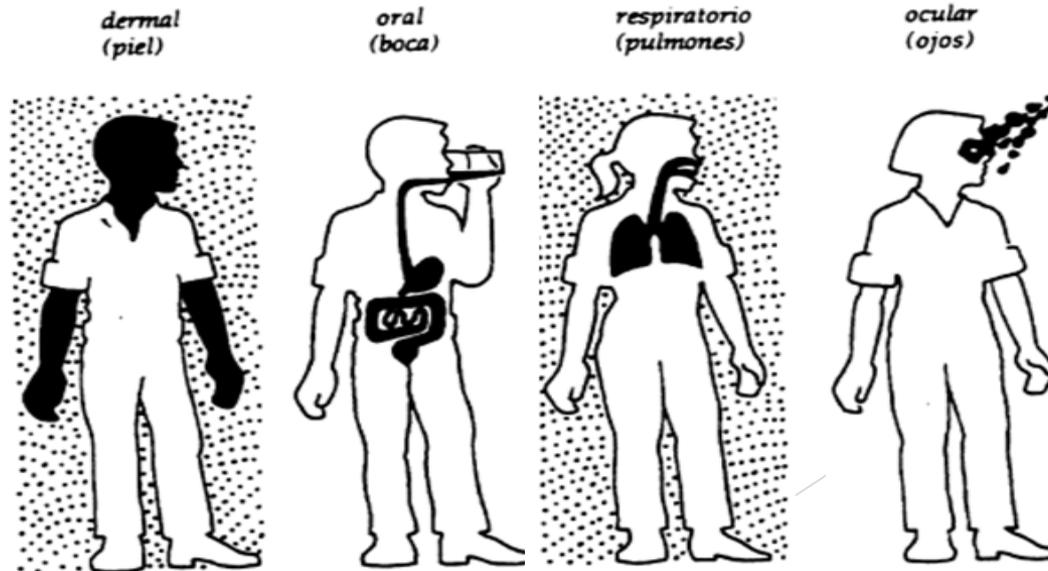
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- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

# Routes of Pesticide Exposure

Where and in what forms pesticides may be encountered:

- ▶ Treated surfaces in the field (e.g. plants, soil)
- ▶ Residues on clothing and PPE
- ▶ Application equipment
- ▶ Drift



# Symptoms of Pesticide Exposure

- ▶ Headache
- ▶ Dizziness
- ▶ Vomiting
- ▶ Fatigue
- ▶ Fever
- ▶ Sweating
- ▶ Muscle cramps
- ▶ Hives
- ▶ Rash
- ▶ Drooling/Salivation
- ▶ Difficulty breathing



# Examples of Pesticide Exposures



# Minimizing Pesticide Exposure

- ▶ Wear clothing that covers your skin
  - ▶ Long-sleeved shirt
  - ▶ Long pants
  - ▶ Shoes and Socks
  - ▶ Hat or Cap



# Minimizing Pesticide Exposure (cont.)

- ▶ Wash your hands before eating, drinking, smoking, chewing gum, or going to the bathroom



# Minimizing Pesticide Exposure (cont.)

- ▶ Children/nonworking family members should keep away from pesticide-treated fields
- ▶ At the end of your work day:
  - ▶ Take a bath or shower
  - ▶ Keep and wash work clothes separate from other laundry items



# Minimizing Pesticide Exposure (cont.)

- ▶ Never store pesticides in bottles or other containers commonly used for food or drink
- ▶ Never take pesticides or pesticide containers home (even after rinsing)



# First Aid for Pesticide Illness/Injury

If you or others in the field are exposed to pesticides and feel ill:

- ▶ Stop work and leave the treated area safely and immediately
- ▶ Ask for help immediately; Call 911 and notify your employer/supervisor
- ▶ Tell emergency responders about the pesticide(s) that may be involved



# First Aid for Pesticide Illness/Injury (Cont.)

- ▶ Follow decontamination procedures
  - ▶ Rinse eyes for 15 minutes (while blinking) if eyes are exposed
  - ▶ Wash or shower immediately with soap and water and change into clean clothes if body is exposed
- ▶ If necessary, perform CPR *if you are trained*



# Heat-Related Illness

- ▶ If the temperature is equal to or greater than 95° F
  - ▶ Be aware of heat illness symptoms
  - ▶ Drink more water and more often
  - ▶ Designate a person to call in case of an emergency
  - ▶ Minimum of a 10 minute break every 2 hrs.



# Symptoms of Heat-Related Illnesses



## ▶ Heat Exhaustion

- ▶ Headaches
- ▶ Dizziness or fainting
- ▶ Weakness
- ▶ Wet skin
- ▶ Irritability
- ▶ Thirst
- ▶ Nausea or vomiting

## ▶ Heat Stroke

- ▶ Confusion
- ▶ Unable to think clearly
- ▶ Pass out or collapse
- ▶ Seizures
- ▶ Stop sweating

# Heat-Related Illness Prevention

- ▶ Water - Stay hydrated/drink water often
  - ▶ Access to drinking water (1/4 gal/hr/shift)
- ▶ Rest
- ▶ Shade - Must be available if the temperature exceeds 80° F
- ▶ Wear comfortable clothing that will protect you



# Heat-Related Illness (cont.)

- ▶ Report heat illness symptoms early
- ▶ Know first aid and emergency response
- ▶ Emergency call 911



# Heat-Related Illness (cont.)

- ▶ Move to a cool place to rest (Shade)
- ▶ Provide water as long as the person is conscious and not vomiting
- ▶ Help cool the person (Cold compress, fans, ice packs, etc.)



# Employee Rights

- ▶ Receive information regarding pesticides you may potentially be exposed to
- ▶ You may report suspected use violations to the Department of Pesticide Regulation or County Agricultural Commissioner
- ▶ You are protected against retaliatory action for reporting pesticide related incidents



# Where to Report....



## Pesticide Related:

- ▶ Predetermined Emergency Medical Facility (A-9 series)
- ▶ California Poison Control system, 24 hours a day, at 1 (800) 222-1222 for tips and references for health care providers
- ▶ Emergency: 911

## Pesticide Related/Unsafe Work Conditions:

- ▶ County Agricultural Commissioner



- ▶ Office of legal services, such as Rural Legal assistance of California (CRLA) 1 (800) 677-5221, or your Union

# Resources

**Vista Community Clinic**  
1000 Vale Terrace  
Vista, CA 92084  
(760) 631-5000

**Escondido Community Center**  
460 N. Elm St.  
Escondido, CA 92025  
(760) 737-2000

**North County Health Services**  
150 Valpreda Rd.  
San Marcos, CA 92069  
(760) 736-6767



**Department of Agriculture/Weights and  
Measures  
County of San Diego**



**Pesticide Regulation Program  
(858) 694-8980**

**Spanish Hotline  
1-(877) 784-6426**