# Doing a Good Job Is Not Enough: You Need to Let People Know

Claudio Sorrentino, PhD Valerie Hanley, PhD

Department of Toxic Substances Control

The information contained herein represent solely the opinions of the authors and should not be interpreted as the official position of the California Department of Toxic Substances Control



#### **Far Too Common Site**

- Orphan Site
- PCE Plume
- Dry Cleaners





## "Anytown" - Central Valley

Pop. ~50,000

>70% Latino or Hispanic

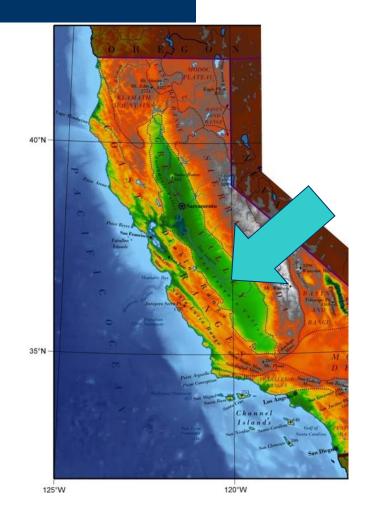
Main industry: agriculture

Tradition of activism (Farm Worker Unions)

High Poverty rate (~30%)

#### Low Education

- <5% Bachelor</p>
- 35-44% over 25yr not finished HS





# **Community Profile**

Population Characteristics		
Sensitive Population Indicators	Percentile	
Asthma:	61%	
Low Birth Weight:	59%	
Cardiovascular Rate:	73%	
Socioeconomic Factor Indicators Perce		
Education:	80%	
Linguistic Isolation:	87%	
Poverty:	73%	
<u>Unemployment:</u>	39%	
Housing Burden:	36%	

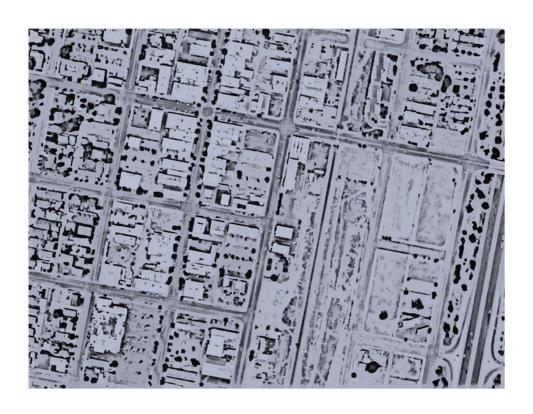
4

Source: CalEnviroScreen



# **Investigation Area**

- Downtown
  - Retail Shops
  - Medical Offices
  - Library
  - Church
- Residential Area





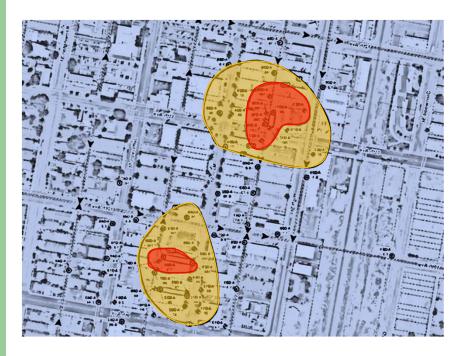
## **Communication Challenges**

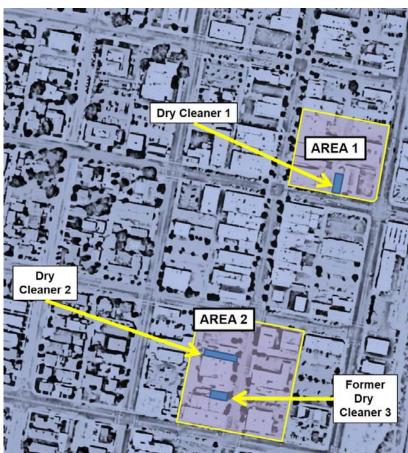
- Matter very technical (and scientist are <u>not</u> the best communicators)
- Vapor Intrusion unfamiliar / scary
- Sampling intrusive / disruptive
- Groundwater contaminated



## What people see

#### There is a problem







### What people see

#### You have known for years



"Second quarter <u>2008</u> groundwater monitoring results submitted on behalf of the XYZ by Madeup Consulting, Inc., indicated PCE concentrations of up to 777 parts per billion"

# Questions that Come to Mind (and what they actually mean)



Why now?
Are we in danger?
Is that why you are taking action now?

You have known for many years, why you haven't done anything?
Why should I trust you now?



#### Partnering with Stakeholders

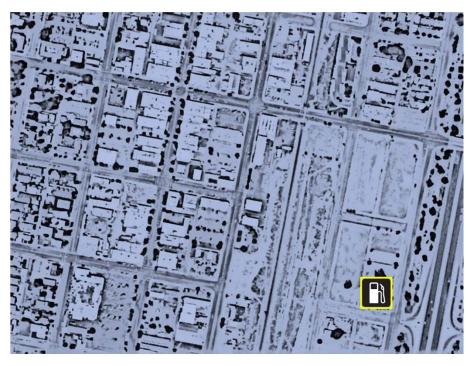
- Environmental activist group
- City officials
- Chamber of Commerce
- On their turf
- Division Chief + Assistant Director for EJ
- Looking for partnership, collaboration, ideas on outreach and public meeting





### What people don't see

#### Following the bread crumbs



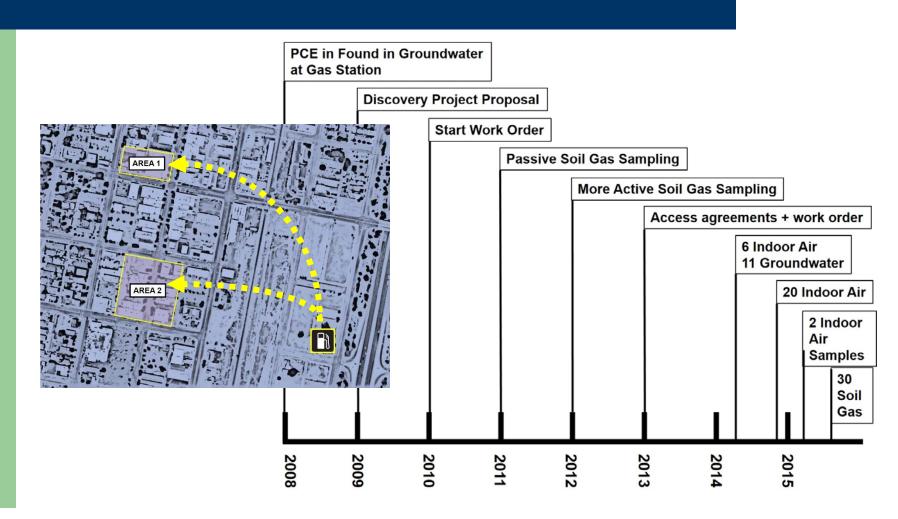




It all started from a call on an unrelated investigation with "unexpected" results



### What people don't see





#### We Did A Good Job

Indoor Air Samples Collected



**Quick Responses** 



Expanded Indoor Air Investigation



Soil Vapor Extraction Pilot Test





# Communicate in Both English and Spanish



Department of Toxic Substances Control - Fact Sheet

ebruary, 2015

# COMMUNITY UPDATE

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

# Indoor Air Studies in downtown Anytown buildings

The California Department of Toxic Substances Control (DTSC) continues to investigate soil and indoor air contamination in the area of

DTSC has done indoor air sampling in a number of commercial buildings along
Avenue, and Street. These studies show PCE in your air.

In some stores, there is also TCE in your air. Dry cleaners used PCE and TCE as cleaning chemicals in the past. Dry cleaners may still use PCE. Your store is near a dry cleaner or a former dry cleaner business.

What are the risks to you?

Public Open H



to 7 p.m.



We will answer quest to face in the co meeting room at the Public Library, 92 Departamento de Control de Sustancias Tóxicas - Hoja de Datos

Febrero 2015

# AVISO Comunitario

La misión del DTSC (por sus siglas en Inglés) es protoger a las parsonas y el medio ambiente de california contra los efectos dañinos de las sustancias toxicas a través de la restauración de los recursos contaminados, aplicación, regulación y prevención de la contaminación.

#### Estudios del aire Dentro de Edificios en el Centro Anytown

El Departamento del Control de Sustancias Toxicas (DTSC por sus siglas en Ingles) sigue investigando la contaminacion del aire dentro de edificios y la contaminacion en el suelo, en el area

El DTSC ha tomado muestras del aire en varios edificios comerciales sobre la calle

Estos estudios demuestran la presencia de la quimica PCE.

Dentro de algunos comercios, tambien existe TCE in el aire. Las limpiadurias, usaron PCE y TCE como quimicas en las limpiadurias en el pasado. Algunas limpiadurias pueden toda via usar PCE. Su comercio esta cerca de una limpiaduria, o un negocio

Junta de Puerta Abierta







Febrero 26, 2015, de las 4:30 a las 7:00 pm

El DTSC contestara preguntas en persona en el salon de iuntas de la comunidad de La



# **Explaining Plain Language**



One Million People Exposed\* at the Screening Level



One of those people may develop cancer as a result of that chemical exposure



# **Explaining Plain Language**

	Action Needed	ACTIVITIES
LESS THAN SCREENING LEVEL	NO	None
1x to 100x SCREENING LEVEL INFORMATION		MORE SAMPLES
		MONITORING
		EVALUATE RISKS
		REDUCE EXPOSURE
	REMOVE SOURCE OF	
		CONTAMINATION
More than 100 x SCREENING LEVEL	YES	REDUCE EXPOSURE REMOVE CONTAMINATION



# **Use Familiar Images**



# Door to Door Outreach Personal Touch





The mission of DTSC is to protect Colifornia's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

#### Street Address - Name of Business

DTSC has taken action to reduce the toxic chemicals seeping into the indoor air from underground contamination linked to historical dry cleaner operations.

These "Fast Responses" were taken at Street Address

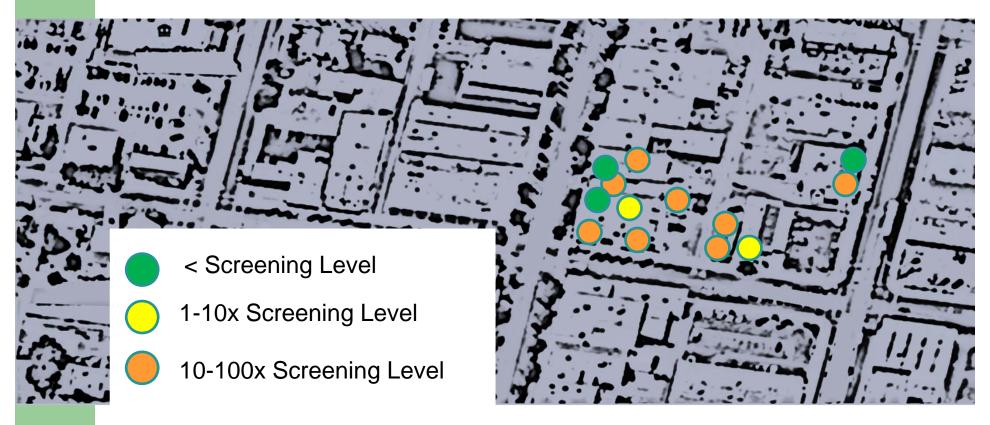
- Repair cracks in concrete slab
- Sealing of openings around pipes and/or wall cracks
- Add carbon filters to existing HVAC systems
- Stand-alone carbon filter unit.

We went back and measured the toxic chemicals in the indoor air after the "Fast Responses" were in place to see how they worked

- Building Specific Reports
- During Business Hours
- Spanish Interpreter
- Prior to Public Meeting

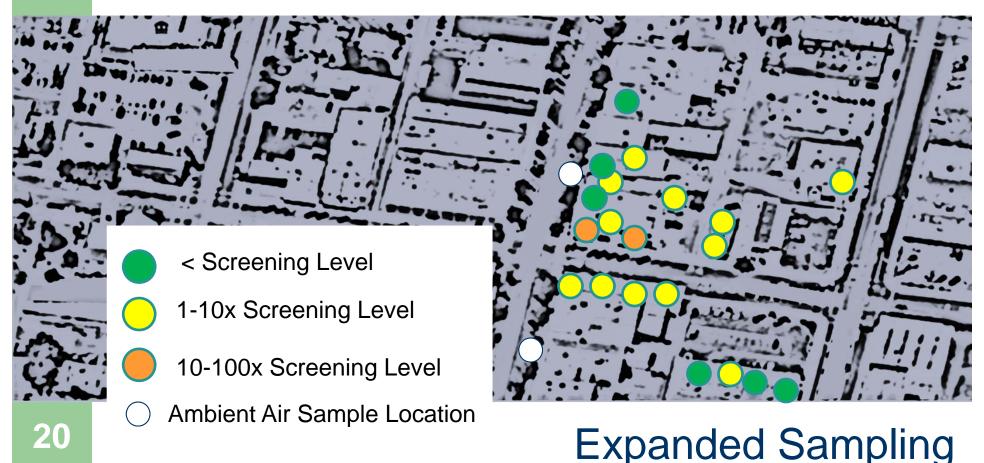
# Tell the Story: Demonstrate Progress





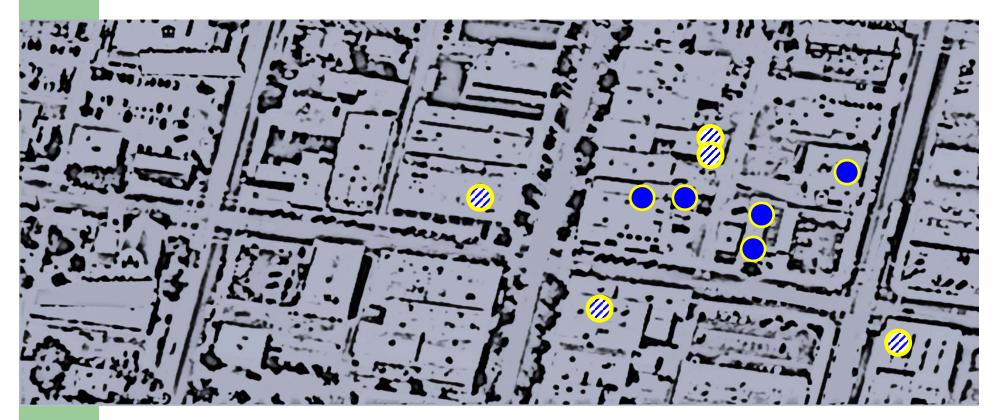
# Tell the Story: **Demonstrate Progress**





# Tell the Story: **Demonstrate Progress**





## Tell the Story: Show the Work







Fast Responses

### Tell the Story: Show the Work





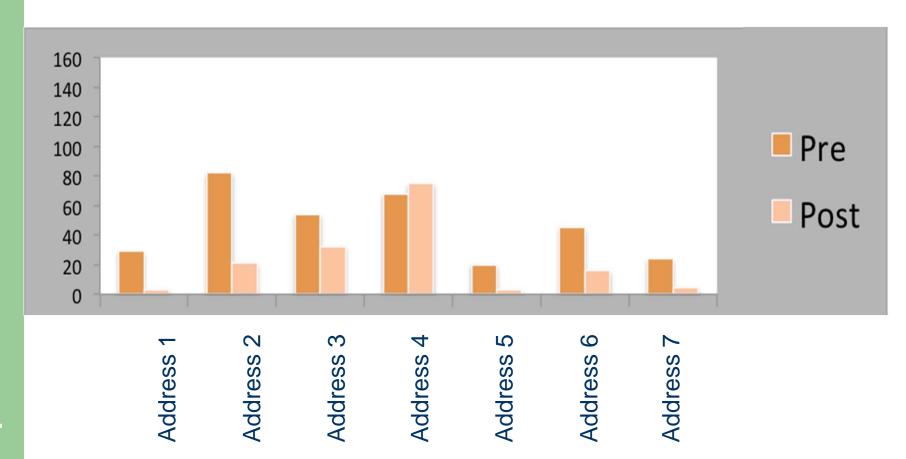
Sealing floor drain



Placing new filter in new intake

## Tell the Story: Demonstrate that it Works

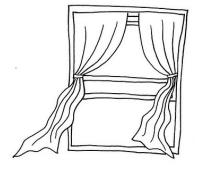






### **Know the Community**

Typical advice: open the windows



 High incidence of "Valley Fever": can't keep windows open





#### A Tree Falls in the Woods

- Keep people informed
- Seek partners
- Be honest
- Be clear
- Show the work
- Know the community

