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Contra Costa County Environmental Health

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Contra Costa County Hazardous Materials

**EH<sub>2</sub>O Recreational Waters**







# Chlorine

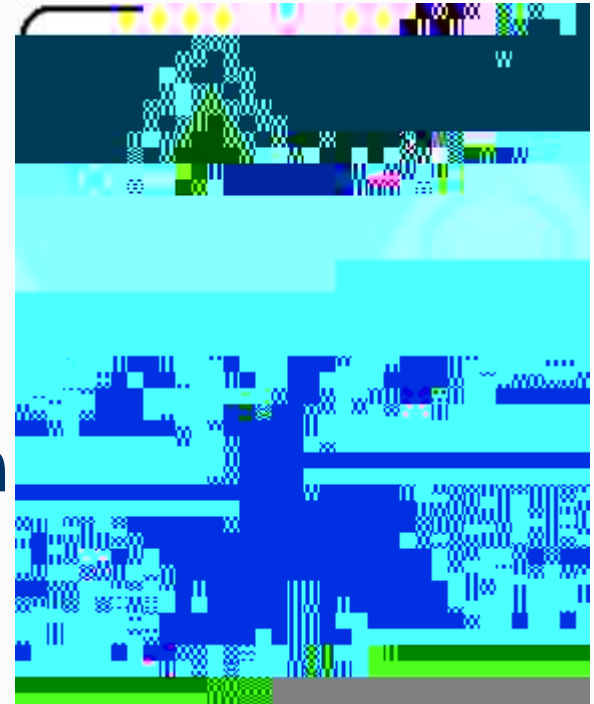
**Widely used and commonly manufactured**

**Respiratory irritant**

**Exposure symptom range from mild respiratory irritation to inflammation of broncheoalveolar tissues**

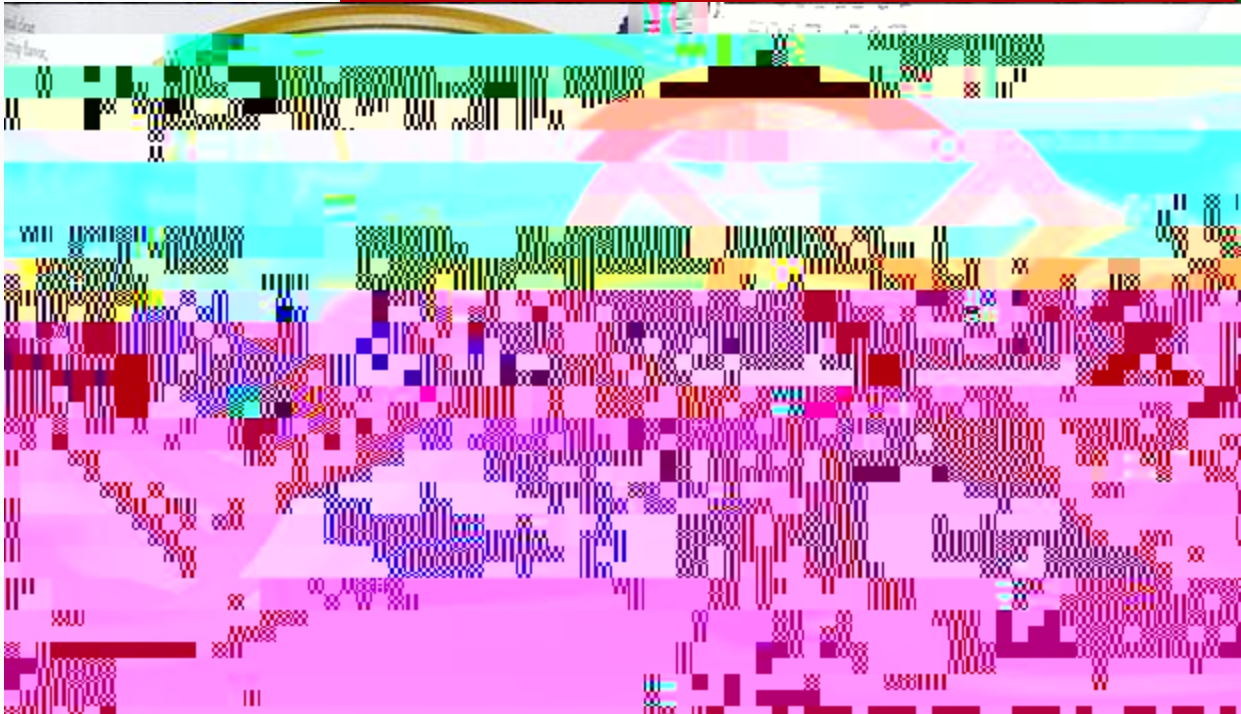
**40 60 ppm: lung injury and pulmonary edema**

**430 ppm: death after 30-min exposure**





# Chlorine





WHO ARE WE AND WHAT  
ARE WE DOING HERE?



# DEODC EPTeam Capacities



Assistance









# Is This a Hazmat Call? Environmental Health? Or Both?





# Timeline of Events

<b>TIME</b>	<b>EVENT</b>
<b>14:29</b>	<b>First 911 Phone Call from Facility Staff</b>
<b>14:31</b>	<b>One Ambulance Dispatched Code 2</b>
<b>14:36</b>	<b>Upgraded Ambulance to Code 3; Dispatch one Engine Code 3</b>
<b>14:41</b>	<b>Dispatched 2 Additional Engines Code 3</b>
<b>14:42</b>	<b>Engine On Scene Requests a Hazmat Response</b>
<b>14:44</b>	<b>Hazmat Response Canceled No Active Leak</b>
<b>15:07</b>	<b>Hazmat Response Requested for Potential Leak Code 2</b>
<b>16:14</b>	<b>Hazmat Unit On Scene (1.75 Hours after 911 Call)</b>
<b>16:30</b>	<b>Environmental Health Specialists On Scene</b>

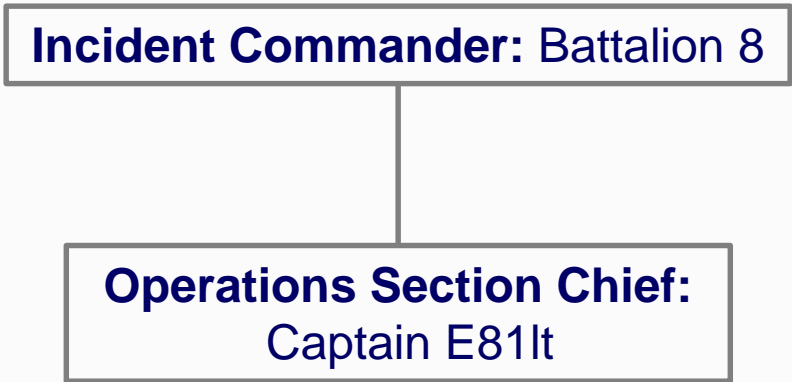


# Media Coverage of the Incident

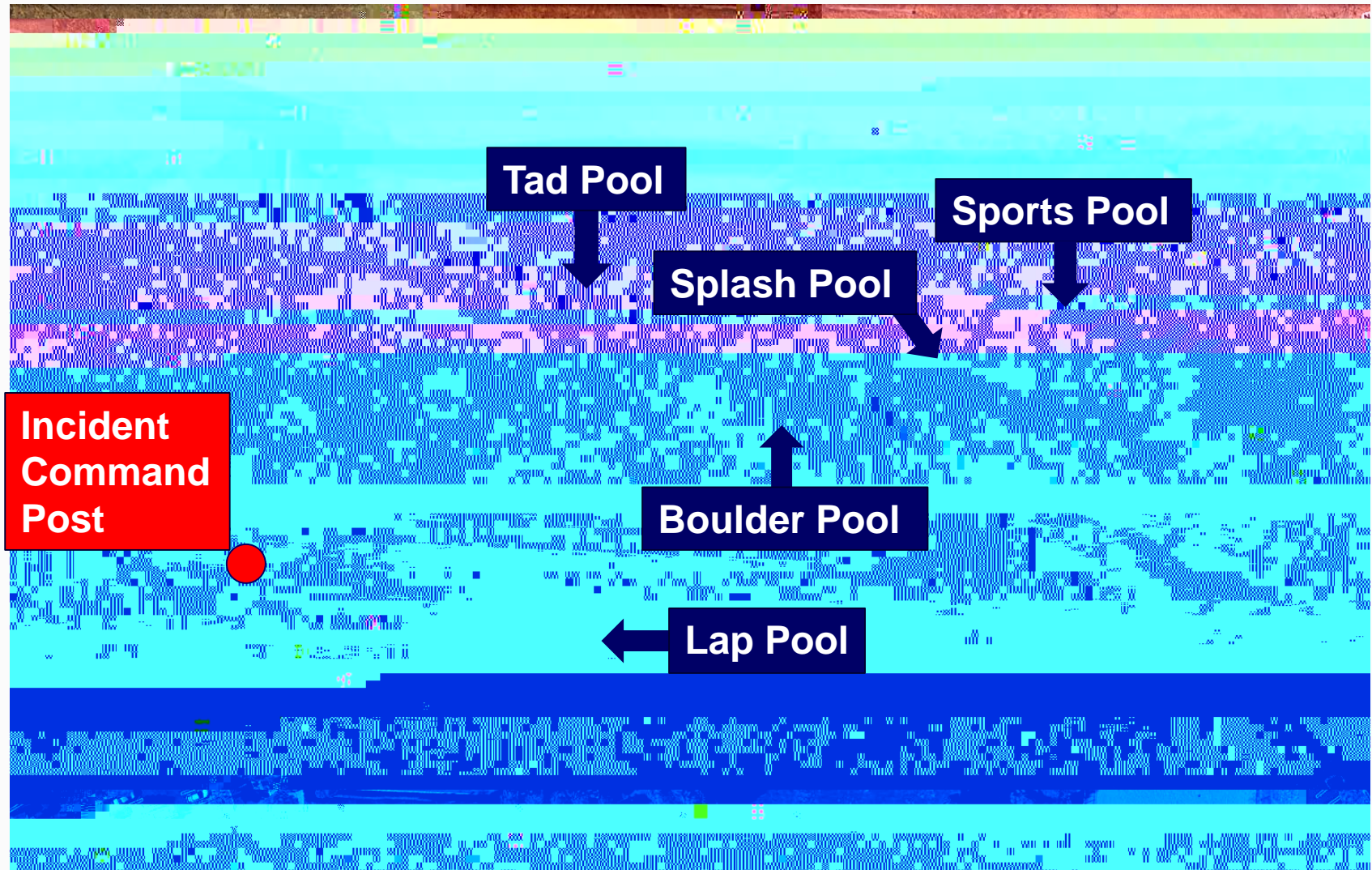




# Command Structure for the Incident

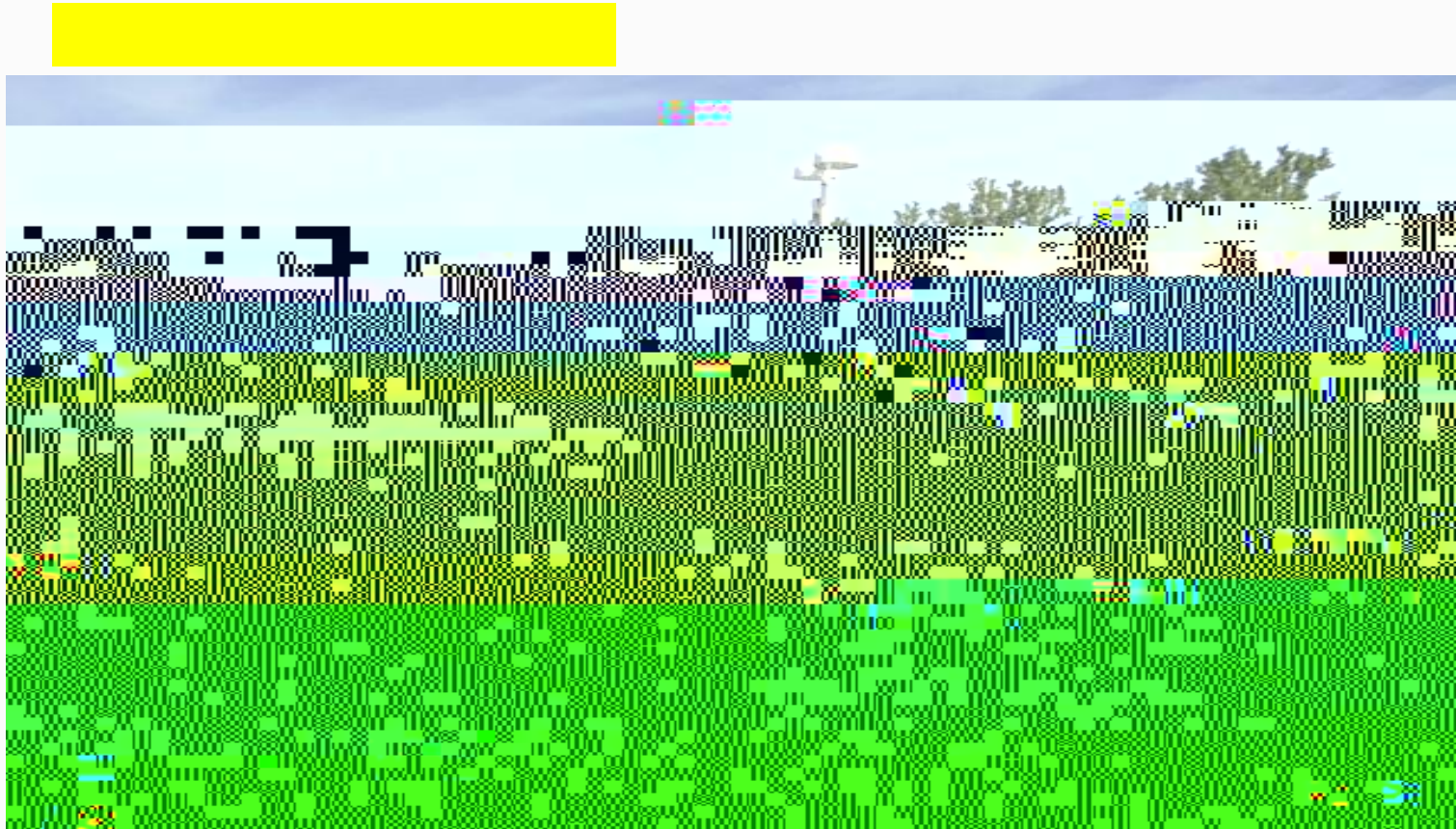


# 5 Pools; 5 Pool Systems





# Facility Closure

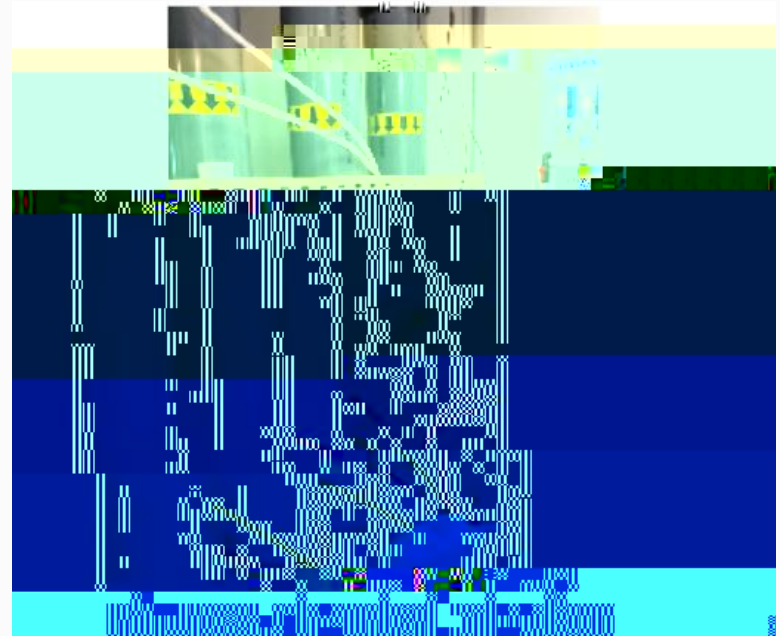
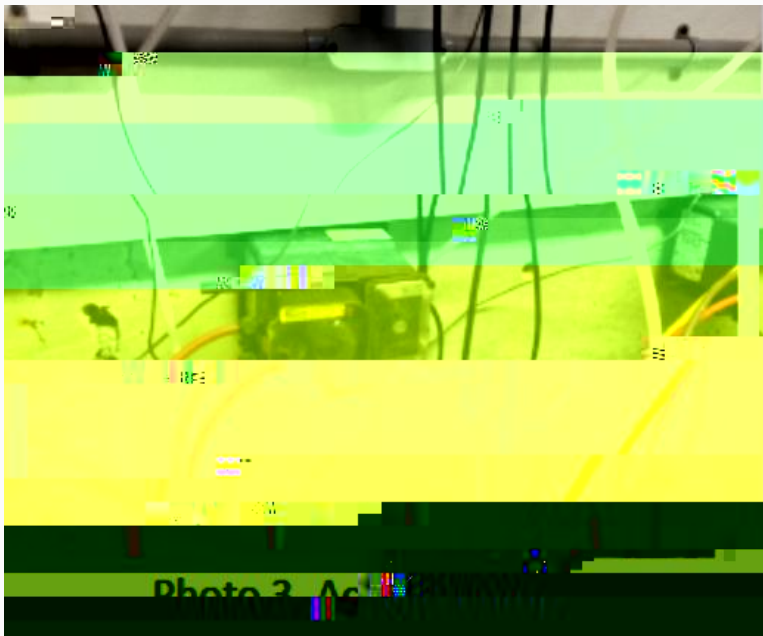




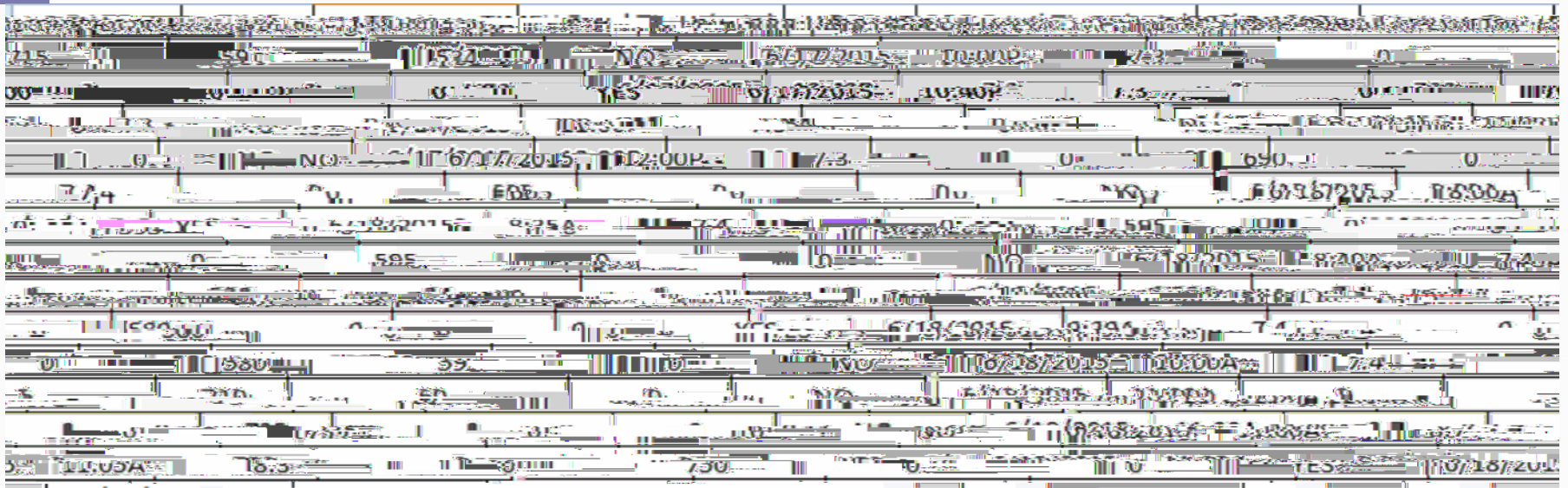
# Pool System Schematic



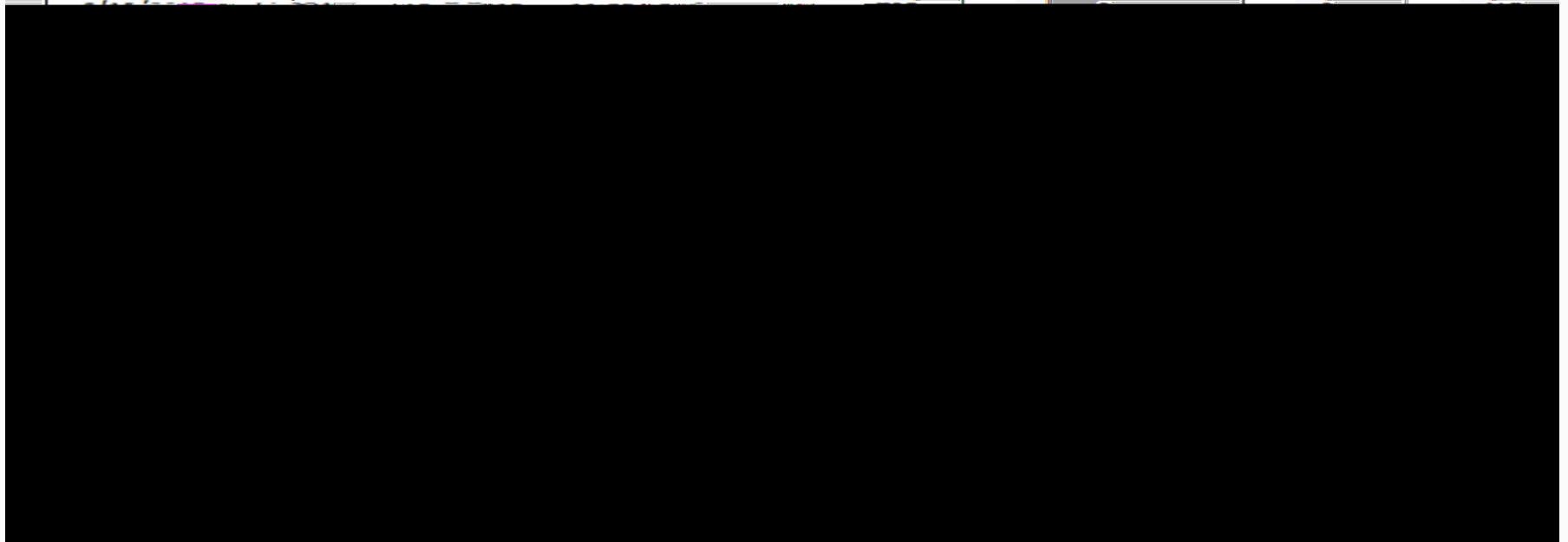
# Pictures from the Pump Room



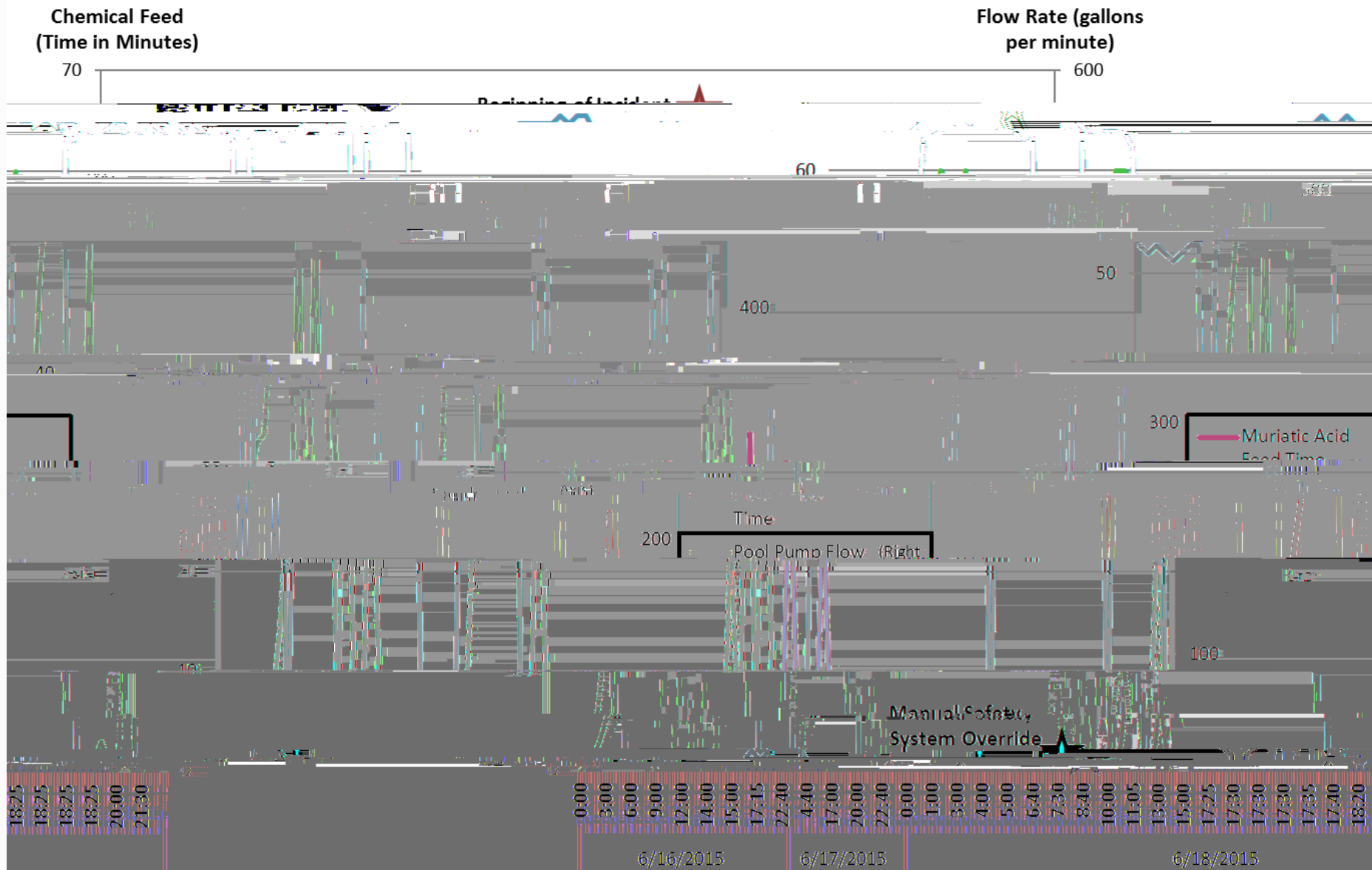
# Documents Received from Facility



The image shows a large table with multiple rows of data. The text is heavily distorted by digital noise and corruption, making it illegible. Some faint words like "NO", "YES", and dates like "6/15/2015" and "6/28/2015" are visible through the noise.

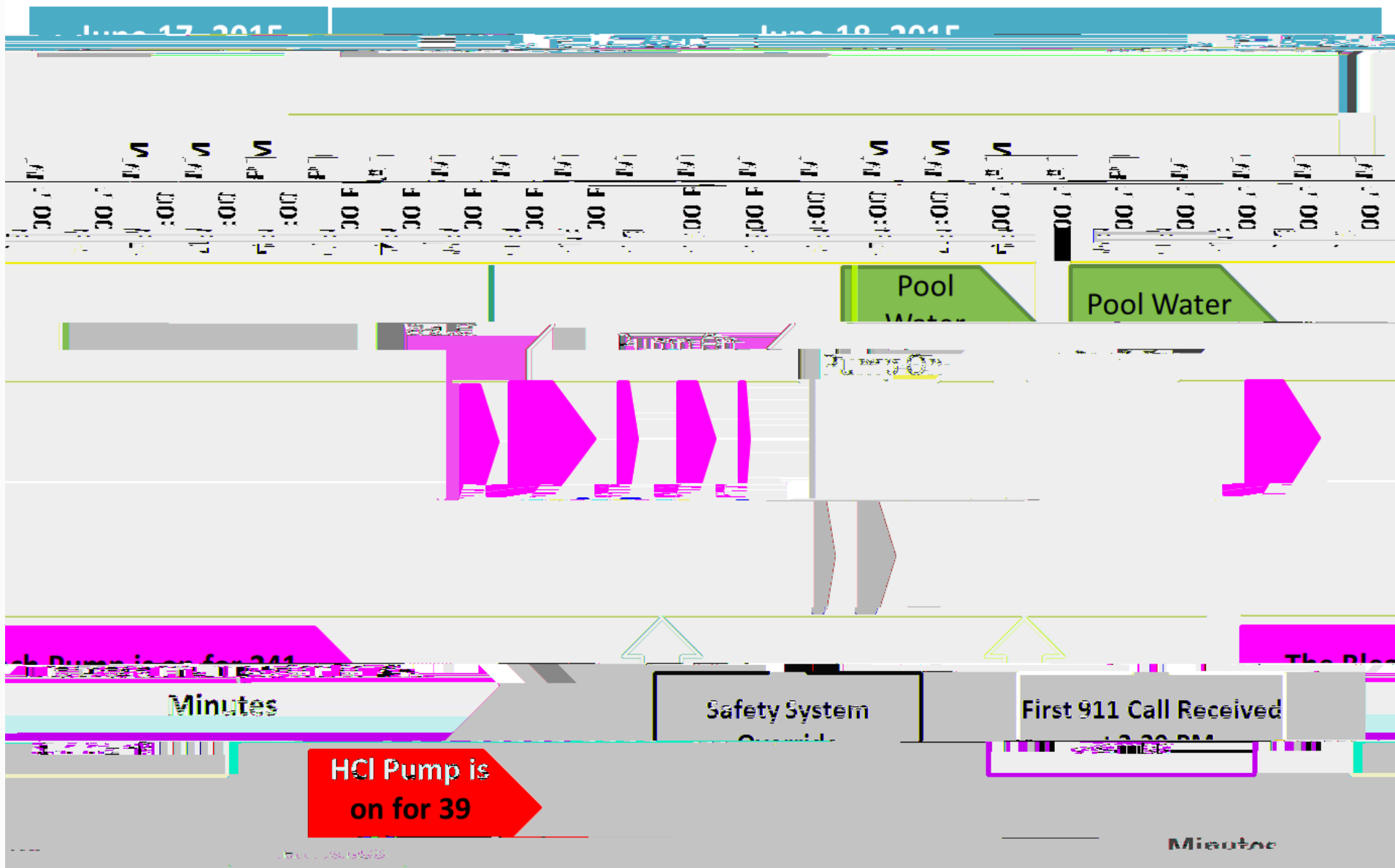


# Pool Chemical Graph





# Timeline of Pool Chemicals



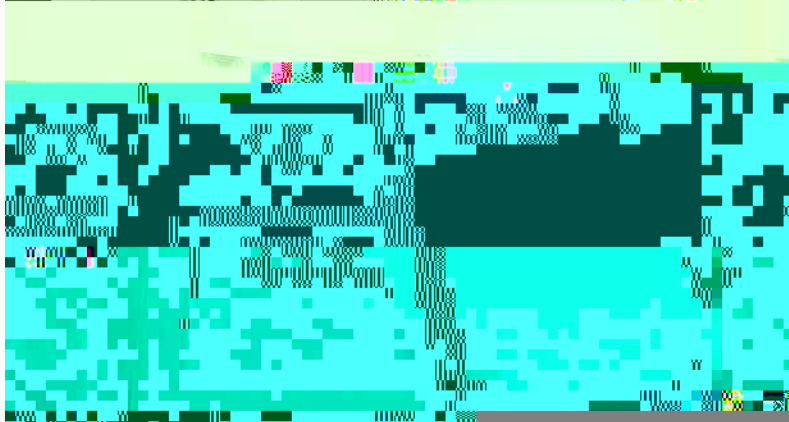
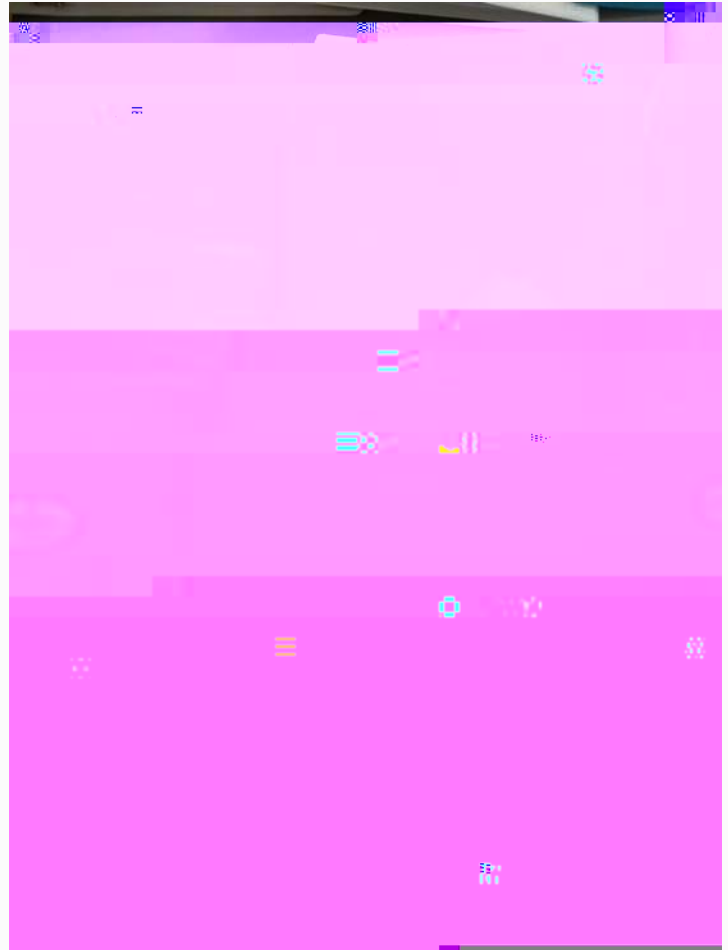
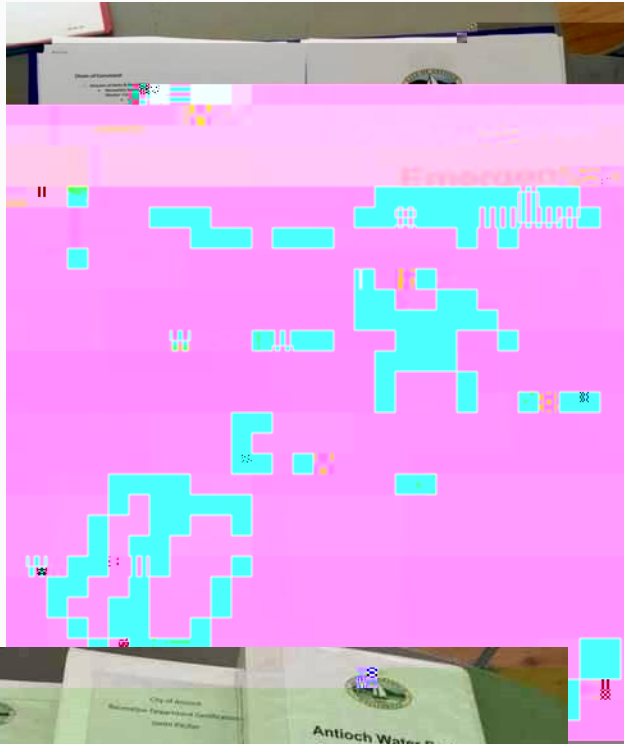






# Corrective Actions

**PROCEDURES**



**POLICIES**





# Lessons Learned

**Under reported HazMat incidents at pools**

**Lack of awareness amongst pool operators**

**Lack of experience in emergency response  
where do we fit in?**



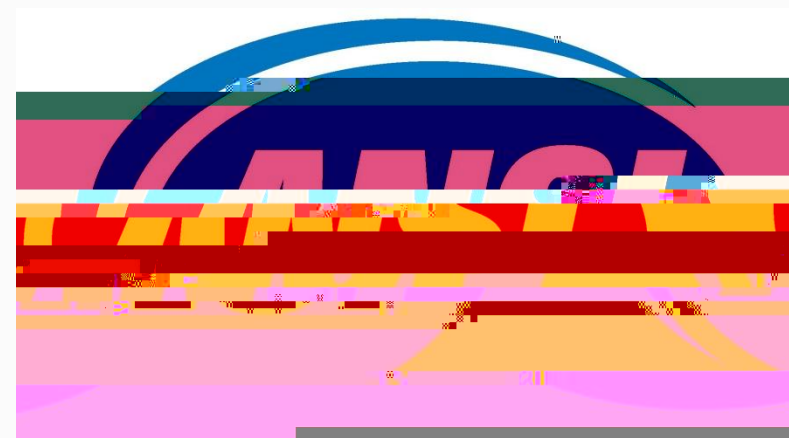
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**Health Officer Advisory**

**Letter to manufacturers**

**Lobby for change in  
standards and certification  
programs for chemical  
controllers**

**Require secondary site-  
specific engineering  
controls**





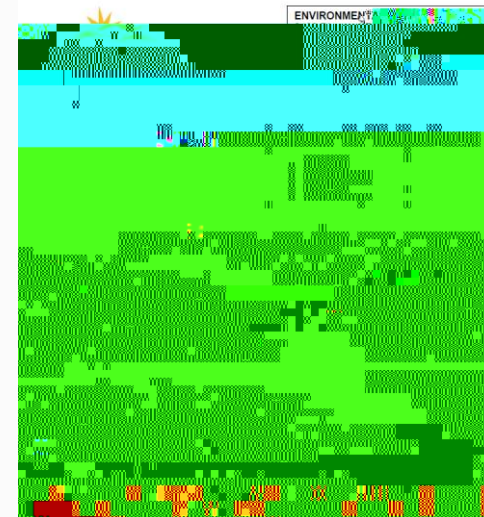
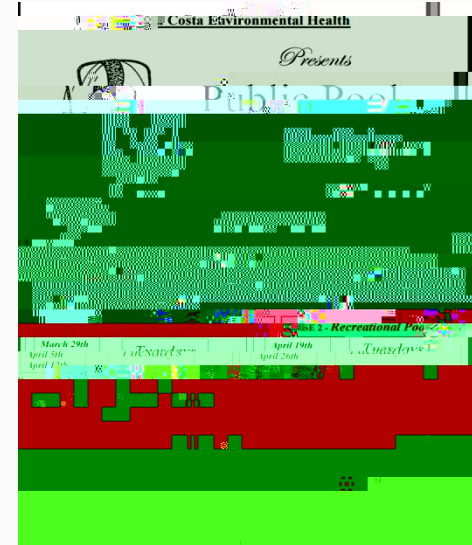
# Outreach

**Program lead provides  
Public Pool Safety  
classes**

**Includes response to  
emergency situations at  
public pools**

**Maintains website**

**Multiple handouts  
provided by inspectors**





# STATEWIDE PICTURE



Photo attribution: Alayna Shulman/Record Searchlight





6 patients

1 admitted



A collage of images showing people at an outdoor event, overlaid with a semi-transparent white box containing the text "81 evaluated at ED". The background consists of several overlapping photographs: a blue tent on a grassy field, a group of people in a red-tinted area, a group of people in a yellow-tinted area, and a group of people in a green-tinted area. The text is centered in the white box.

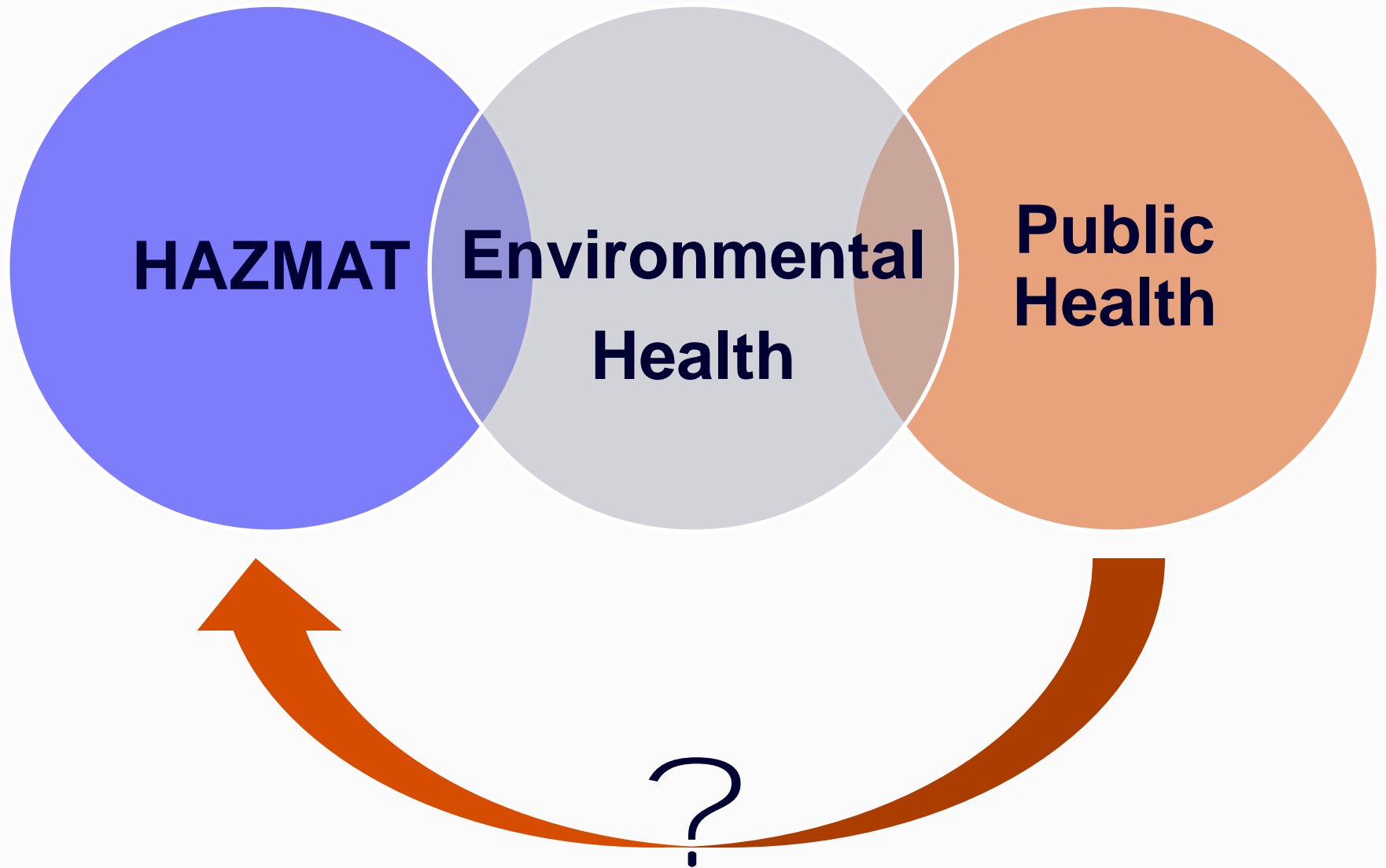
81 evaluated at ED



Upper 05

154 evaluated

4 admitted

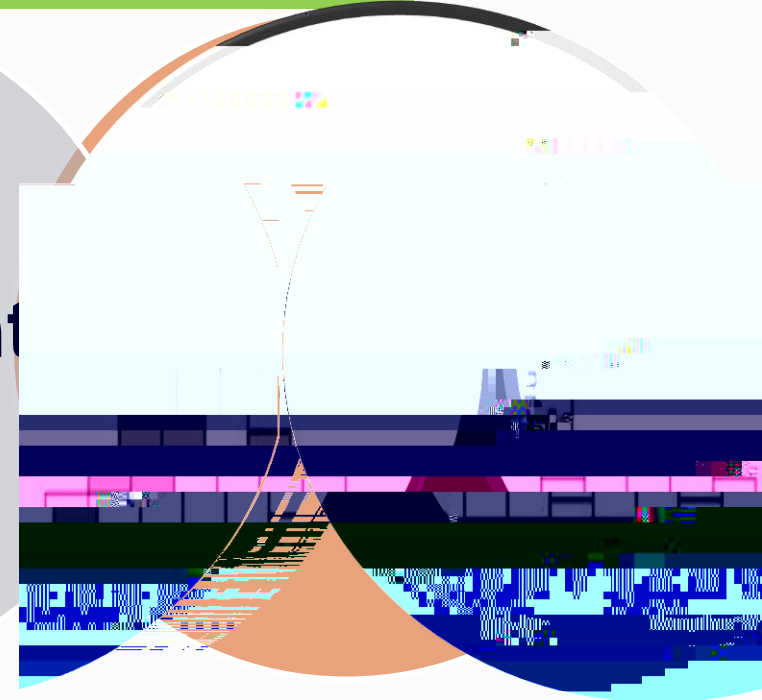


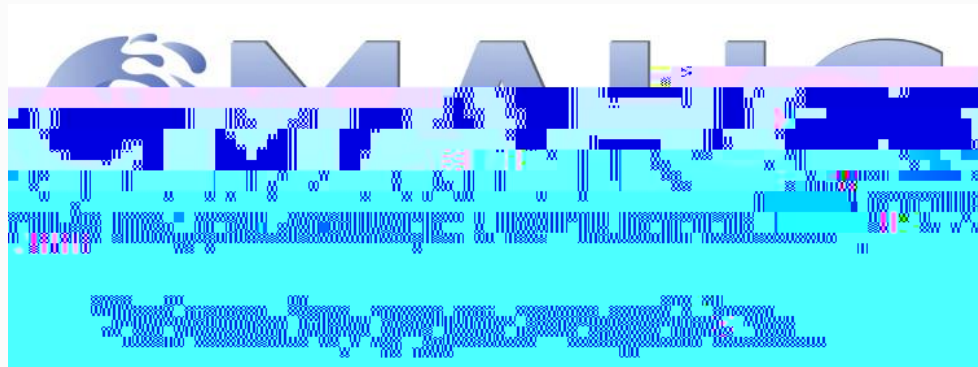
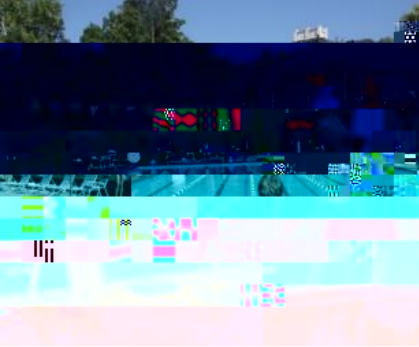
# State



Environment  
Health

Response







# Acknowledgements and Contacts

## **Contra Costa County**

**Lino Ancheta**

**Mary Freitas**

**Seth Heller**

**Rawan Naser**

**Souheil Ben Salha**

**Marilyn Underwood**

## **California Department of Public Health**

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**Justine Weinberg**

## **California Department of Pesticide Regulations**

**Nino Yanga**

## **Centers for Disease Control and Prevention**

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**Jasen**

