

This document is an extract of a larger publication.

civilgrandjury.org is a project of UnGovr.org, a US-based 501(c)(3) nonprofit dedicated to government transparency and public accountability.



highest pollution exposure according to the State Office of Environmental Health Hazard Assessment CalEnviroScreen 2.0 2014 data model.²⁸ CalEnviroScreen incorporates factors of social vulnerability. “Estimated cancer risk in some parts of Wilmington is the highest in Southern California, exceeding 1,000 additional cancers per million residents, which is three orders of magnitude than the National Clean Air Act goal of one in a million.”²⁹

Beverly Hills

The CGJ notes from its research: In contrast to Wilmington, the health and safety of Beverly Hills High School students and the community was the foremost consideration when the city engaged in the leasing of oil wells in that city. The unattractive industrial looking oil well derrick was completely enclosed and decorated as public art.³⁰

On September 27, 2011 the city council approved an ordinance to permanently ban oil drilling in the city.³¹ The operator ceased operation December 2016, filed bankruptcy in March 2016 and again in April 2017.³² The cleanup process will cost between \$5 and \$10 million. According to the city’s administrative officer, the district attorneys have notified the bankruptcy court seeking to reserve a portion of the energy company’s funds for site remediation. Otherwise, the Beverly Hills school district pays for the cleanup.³³

University Park/Historic West Adams Oil Wells

In 2009, inactive wells in University Park, near the University of Southern California (USC), were reactivated using hydrochloric and phosphoric acids to unplug the wells. About this time residents began complaining of headaches and nosebleeds.³⁴ The City Attorney alleged that the company was “willfully disregarding violation notices” from regulatory agencies.³⁵ This site was emitting elevated concentrations of methane, ethane, benzene, propane, and deadly hydrogen sulfide within 1,500 feet of the oil facility where there are five schools located.³⁶

Porter Ranch

On October 23, 2015 ninety-five thousand tons of methane was emitted from the second largest U.S. underground natural gas storage facility located in Aliso Canyon before the leak could be capped.³⁷ Porter Ranch residents were notified of a major methane gas leak on October 23,

²⁸ Barbosa, Tony, Monitor on Willington home’s roofs, LA Times, February 26, 2014

²⁹ Osborn, Barbara, “No false solutions!” Wilmington: Warren E&P Drill Site, Drilling Down, Liberty Hill Foundation, Fall 2015

³⁰ Gilmartin, Wendy, Beverly Hills Fugliest Oil Well aka Tower of Hope, LA Weekly, may 22, 2012

³¹ Taglieri, Joe , Patch Poster, Council Places Permanent Ban on Oil Drilling, September 29, 2011

³² Coleman, Laura, Venco Second Bankruptcy Filing Could Leave Beverly Hills High School Oil Well Dry Financially, Beverly Hills Courier, April 28, 2017

³³ Barragan, Bianca, Curbed News, Beverly Hills High Oil Well Cleanup Plan in Big Trouble, February 29, 2016

³⁴ Sahaugun, Louis, “Crack Down on Archdiocese Owned Oil Field..”, 2016

³⁵ Sahaugun, Louis, “South L.A. Oil Operation I fined”, LA Times, July 30, 2013

³⁶ Osborn, Barbara, When Regulators Fail, University Park: Allenco Site, Map 4, Drilling Down, P. 17, Liberty Hill Foundation, Fall 2015

³⁷ Nikolewski, Rob, Gas leak prompts feds to call for changes, LA Times, October 19, 2016

2015,³⁸ five days following the discovery, and by, January 7, 2016, 11,000 people were relocated from their homes and Governor Brown declared a state of emergency.³⁹ Porter Ranch elementary and middle schools were closed and 1,100 students relocated to other schools.⁴⁰

Torrance

On February 18, 2015 an explosion at the ExxonMobile in Torrance disburshed one quarter ton of sulfur dioxide gas into the air and a cloud of chemical ash rained down on the community.⁴¹

Since then, shutdowns, flaring incidents⁴² and a fire in November of 2016 have increased public anxiety about the refinery. The fire was extinguished within 30 minutes but a 10 inch flare pipe narrowly missed crashing into a tank containing tens of thousands of pounds of modified hydrofluoric acid.⁴³

Movement of Goods, Ports and the I-710 Corridor

Close to 40% of the containerized goods that enter the Ports of Los Angeles and Long Beach are destined to areas outside of the South Coast Air Basin. As such, South Coast Air Basin residents are the recipients of the emissions associated with the movement of goods across the region that benefits the rest of the nation.⁴⁴ There are 28 cities along or around the I-710 freeway; this is the critical linkage of routes, for interstate commerce between the San Pedro Bay ports, the BNSF and UP rail yards along I-5. Port activity is projected to triple in volume by 2035 based on a study of Southern California Association of Governments and projected container volume increases. There is a plan to increase capacity on the I-710 and it is currently under review.

The proposed plan provides environmental improvements to 28 gateway cities, but it's dependent on the outcome of the proposed I-710 Corridor Environmental Impact Report (EIR). The EIR review is scheduled to be completed in the spring of 2018. Several alternative plans in the EIR require the use of zero emission trucks. Trucks will likely be powered by electric motors or will receive electric power while traveling along the freight corridor via an overhead catenary distribution system.⁴⁵

Other Community Risks

Other sources of hazardous contaminants to humans not previously mentioned include contamination of water wells, sewage spills, rain runoff from salvage yards and recycling plants, odor from rendering plants, agricultural and vector control chemicals, noise, or fine-sized dust

³⁸ Holland, Gale, Gas seepage poses no risk, utility says, LA Times, December 27, 2015

³⁹ Johnson, juli, <http://www.inquisitr.com/2737274/porter-ranch-gas-leak-order-socialgas-ordered-to-close-leak-that-is-sickening-residents/>, January 25, 2016

⁴⁰ Kohli, Sonali, What Northridge teachers will tell their students of Porter Ranch kids, LA Times, January 11, 2016

⁴¹ Rocha, Veronica, Too much pressure in equipment triggered Torrance refinery explosion, LA Times, February 23, 2015

⁴² Goffard, Christopher, Torrance refinery cited for gas flaring, LA Times, October 15, 2015

⁴³ Penn, Ivan, Refinery incidents trouble Torrance residents, LA Time, November 20, 2016

⁴⁴ SCAQMD White Paper, "Goods Movement:", October 2015, Page 3.

⁴⁵ I-710 Corridor Draft EIR, Executive Summary, 2012

from processing and manufacturing plants. The CGJ learned about these situations from the County of Los Angeles Regional Planning staff and interviews with community based groups.⁴⁶

Why Are We at Risk ?

The key themes of risk repeatedly heard by the CGJ during this investigation were about the effect of pollution on health, the fragmentation and lack of enforcement of regulations, and the need for more and better data.

Health Risks

Human health is at risk in the County from toxic pollutants and discharges into the air, ground, and water. Evidential proof of health effects from toxin discharge are well documented from scientific knowledge and rigorous medical studies.

- The Keck School of Medicine of USC found that diesel particulate pollution impairs lung development in children ages 10 to 18 and leads to significant deficits in lung growth and performance.⁴⁷
- The National Institutes of Health, the Centers for Disease Control and Prevention, and the Food and Drug Administration all classify lead as a human carcinogen. Lead is a powerful neurotoxin that poses the greatest risks to children younger than age 6 that will result in developmental problems, learning disabilities and other harmful effects.⁴⁸
- Health impairment from air pollution is acknowledged and documented by the SCAQMD. Specific ailments from specific chemicals are cataloged in Table 1.⁴⁹

⁴⁶ Lopez, Mark, Interview with CGJ, East Yards Community for Environmental Justice, January 9, 2017

⁴⁷ New England Journal of Medicine, The Effect of Air Pollution on Lung Development from 10 to 18 Years of Age, September 2004

⁴⁸ American Academy of Child and Adolescent Psychiatry, https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/Facts_for_families_Pages/Lead_Exposure_In_Children_Affects_Brain_And_Behavior_45.aspx

⁴⁹ SCAQMD 2016 Air Quality Management Plan, Chapter 2, Air Quality and Health Effects, Table 2.1

Table 1
Health Effects from Air Pollutants

Air Pollutant	Key Health & Welfare Effects
Ozone	Pulmonary function decrements and localized lung injury in humans and animals, increased mortality risk and increased respiratory related hospital admissions and emergency room visits
Fine Particulate Matter (PM2.5)	Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease, decline in pulmonary function and growth in children and increased risk of premature death
Respirable Particulate Matter (PM10)	Aggravation of angina pectoris and other aspects of coronary heart disease, decreased exercise tolerance in persons with peripheral vascular disease and lung disease and possible impairment of central nervous system functions
Nitrogen Dioxide (NO ₂)	Potential to aggravate chronic respiratory disease and respiratory symptoms in children with asthma and increased airway responsiveness in asthmatics

Enforcement

When the CGJ asked interviewees if more laws were needed we were told that existing regulation enforcement by County departments needs to be addressed through the lens of health risk. An environmental scientist, director of an environmental justice foundation and an air quality medical researcher agreed that the County lacks a health risk enforcement approach. To implement this approach requires the expanded role and authority for public health analysis in the permitting process of land-use planning, zoning, business license, and building permits.

County, state and federal agencies’ inspection and oversight resources are limited and their inspections mostly focus on singular events. The DPH has described to the CGJ a better approach to inspections. In their regulatory involvement with the City of Paramount HC contamination, they expanded their inspection to include a cluster of metal processing facilities. Though they identified the source of violation, they also inspected the other metal processing facilities. They found that up to 60% of these facilities were non-compliant to existing regulations. The DPH discovered there was a cumulative effect from the close proximity of several chromium plating facilities; while each plant may be operating (emitting) within regulatory limits, the combined emissions from all the facilities may exceed acceptable limits. For these inspections, the DPH mobilized and partnered with SCAQMD and other agencies. The DPH has the authority to shut down operations of an industrial facility that endangers public health.⁵⁰

⁵⁰ Range, Cyrus, County of Los Angeles Department of Public Health Letter, December 1, 2016

Managing staff from Coalition for Clean Air gave us examples of regulatory rules that have succeeded to include - banning, controlling, and limiting specific pollutants: lead-free gas and paints, no “bunker fuel” for ships within 200 miles of coastline, no use of perchloroethylene used in dry cleaning, etc.

Data and Monitoring

There are two key data models used in identifying areas of high concentrations of harmful chemicals. MatesIV and CalEnviroScreen. The former is the system SCAQMD developed and the latter was developed by the State.

The MATES IV Study uses monitoring data from a network of 10 fixed sites used to monitor toxic air contaminants once every six days for one year. Air toxin levels throughout the Basin are estimated from simulations using data collected from fixed sites along with data from the Air Quality Management Plan.⁵¹

CalEnviroScreen is a mapping tool that helps identify California communities that are most affected by different sources of pollution, and where people are often especially vulnerable to pollution’s effects. It uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.⁵²

Scientists and researchers use the Mates and CalEnviroScreen systems at Occidental College Urban and Environmental Policy Institute expressed their need for greater precision and transparency of the data. To accomplish this they recommended:

1. Relocate the existing monitors and add more SCAQMD monitors in the known areas of high contamination like the port and I-710 corridor.
2. Increase the number of data points across the basin so that estimated measurements between existing points provides real time measurements.
3. Develop an integrated information system accessible to the public.

A system concept for improving data and monitoring is described here:⁵³ This system would receive pollution measurement data from a dense set of networked sensors with emphasis on critical points (i.e. “hot spots”) that are known to have been active pollution sources. The system should analyze the input data to determine the current “pollution state” throughout the County. If the pollution state at any area of the County rises above safe levels, the system would sound an

⁵¹ MATES IV employed the Comprehensive Air Quality Model with Extensions (CAMx) as the dispersion and chemistry modeling platform used to simulate annual impacts of both gas and particulate toxic compounds in the Basin.

⁵² <https://oehha.ca.gov/calenviroscreen>

⁵³ CGJ originated concept, represent CGJ opinion

alarm intended to trigger corrective action. Pollution state information should be permanently recorded for future access and analysis. Recorded pollution state information should be made publically accessible in real time.

Cumulative Effect

Staff members of the DPH, USC School of Medicine and Coalition for Clean Air consider the cumulative effects (CE) of all pollutants to be a major concern for human health. As an example of how CE works; consider a factory operation that emits a pollutant at a permitted level of the contaminant; what is the effect of multiple compliant sites all emitting the same pollutant within proximity of each other? It would be beneficial to quantify pollution density or correlate health symptoms with specific pollutants. If high CEs are detected, business permits would be limited for an area that has reached the maximum pollution density for the area. There is no system in the County to measure cumulative effect of pollutants. Mates and CalEnviroScreen are good for reporting data at the gross level but sometimes these systems may not have been updated with current data according to a professor at Occidental College Urban and Environmental Policy Institute involved with air quality measurement.

Resources to Move Forward

This next section addresses the organizational forces that our study found to be pivotal to prevent and mitigate toxins in our environment.

Community Based Organizations

The CGJ conducted interviews with staff of the Liberty Hill Foundation, East Yards Communities for Environmental Justice and Coalition for Clean Air. We studied their web site, publications and newspaper reports of their activities. We formed the following view of these and other organizations like them: Community-based-organizations (CBOs) provide a counter balance and with trust can partner with government agencies. They accomplish this by collecting evidentiary environmental data, presenting their views through publication; participating in public meetings; obtaining grants for research; review EIRs for impacts to their communities, and proposing solutions in the interest of the community.

CBOs have resorted to filing law suits as leverage to mitigate or eliminate environmental health hazards in their communities and sometimes are successful in their efforts. Industrial violators may have legal protection because they operate under grandfathered environmental ordinances, but this can be challenged when there is scientific data to prove the existence of a health hazard.⁵⁴

Based on our interviews with staff of the Liberty Hill Foundation, East Yards Communities for Environmental Justice and Coalition for Clean Air, we observed some CBOs have strong staff

⁵⁴ Sahaugun, Louis, "South L.A. Oil Operation I fined", LA Times, July 30, 2013

and financial resources to conduct effective programs and others are short on capacity and funding. These community groups represent people who work and live in high health risk communities and have vital local knowledge of environmental conditions. All CBOs need to be heard and provided the opportunity to partner and work with government agencies.

Communities that are overburdened with environmental pollution sense a lack of environmental justice when they compare the government response times between the Porter Ranch gas leak and the Boyle Heights lead contamination.⁵⁵ In our interviews with staff of the Liberty Hill Foundation, East Yards Communities for Environmental Justice and Coalition for Clean air they said that public participation groups have lost trust in government agencies. To find a government agency to address the problem they often had to navigate through a maze of government agencies to finally be heard. Residents of historic West Adams University Park Los Angeles, in close proximity to oil wells, called SCAQMD with hundreds of complaints. This is an example of the time-consuming challenge to get the right data to the right department with the right regulatory authority. The West Adams community had to work its way to a U. S. Senator to get action. For two years this community experienced and lived with a health threat.⁵⁶

Based on all of our interviews the CGJ believes there should be an environmental ombudsman function to address citizen reports of pollution.⁵⁷ This would provide a unified, high quality point of contact allowing any person who believes they are experiencing environmental pollution to be connected to the County function which can take immediate, informed action to investigate the facts of the event and resolve it. The effectiveness of the Environmental Pollution Ombudsman function should be measured and tracked with objective performance data (e.g. time from initial contact to resolution, resolution statistics, callers' satisfaction, etc.). Performance data should be publicly accessible and should be used to improve the Ombudsman function performance.

Department of Public Health

Humans and human health were affected by the recent incidents of the Exide battery plant lead contamination and the Aliso Canyon gas leak. Neglect of the DTSC to properly regulate the Exide plant in Boyle Heights caused children in the proximity of the plant to register excessive levels of lead in their blood⁵⁸. The high concentration of methane gas at Aliso Canyon forced families in Porter Ranch to leave their homes and for nearby schools to be relocated.⁵⁹ These events clearly demonstrate there is causal relationship between the conditions of “bad toxic contamination” and “bad health.”

⁵⁵ The Times Editorial Board, “Why does affluent Porter Ranch get more urgent relief than working-class Boyle Heights”, January 29, 2016

⁵⁶ Sahaugun, Louis, “Crack Down on Archdiocese Owned Oil Field..”, 2016

⁵⁷ CGJ originated concept, represent CGJ opinion

⁵⁸ Barbosa, Tony, Higher levels of Lead in blood of children near Exide plant in Vernon, LA Times, April, 18, 2016

⁵⁹ Johnson, Juli, <http://www.inquisitr.com/2737274/porter-ranch-gas-leak-order-socialgas-ordered-to-close-leak-that-is-sickening-residents/>, January 25, 2016

The DPH pursuant to Section 11.02.190 of the Los Angeles County Code exercised its authority to abate operations of an industrial facility that endangered public health by emitting hexavalent chromium in the City of Paramount.⁶⁰ Environmental experts interviewed by the CGJ recognize health to be a factor that should be included within the regulations for land-use, zoning, business licensing and building and safety permitting. The engagement of the DPH should be expanded in authority and public health analysis in zoning, building permits, etc., for industries handling toxic elements.

As a result of the catastrophic events of Exide and Aliso Canyon, the County of Los Angeles Board of Supervisors (BOS) is addressing environmental health oversight and monitoring⁶¹ and the conditions of oil and gas wells in the unincorporated areas of the County.⁶² The SCAQMD is responsible to oversee and manage air pollution; the DTSC handles facilities above ground, and the State Department of Oil, Gas and Geothermal Resources handles pollution from below the ground. The DPH is changing this paradigm to avoid the fragmentation of enforcement in the following way. In two pilot projects, described to us by staff of the DPH, they are changing the smokestack approach of regulatory compliance with a team that includes six regulatory agencies. The agencies are:

- County Regional Planning
- County Public Works
- County Hazmat
- California Regional Water Quality Board
- Southern California Air Quality District
- California Department of Toxic Substance and Control

A key component of DPH's plan is collaborating with community groups by having them assist in identifying illegal operators and providing evidence that demonstrates the need for environmental enforcement.

The County of Los Angeles Board of Supervisors Oversight

The BOS has recognized the need for the County to have a more significant and proactive role in environmental health oversight. On March 29, 2016 they passed a motion⁶³ to convene a strike team to assess the conditions, health risks and regulatory compliance associated with existing oil and gas facilities. On June 27, 2016 they instructed the Chief Executive Officer (CEO) to prioritize needs in environmental health oversight and monitoring.⁶⁴ As a result this motion, the County Department of Health has designed a model for enhanced environmental oversight and monitoring. The title of this project is "Building Capacity to Address Environmental Health

⁶⁰ Rangan, Cyrus, Deputy Health Officer, Department of Public Health Directive, December 1, 2016.

⁶¹ Agenda, County of Los Angeles Board of Supervisors, June 27, 2016

⁶² Agenda, County of Los Angeles Board of Supervisors, Item 12, March 29, 2016

⁶³ Bruckner, Richard J., Board Letter, March 16, 2017

⁶⁴ Harnai, Sachi A., Board Letter, December 13, 2016

Threats.” Supervisor Kuehl was named to the SCAQMD board. In an interview with the LA Times the supervisor described her approach as “strongly regulatory.”⁶⁵

A deputy of County Supervisor Solis, described to the CGJ how the supervisor has initiated environmental monitoring of the Quemetco battery plant to avoid a repeat of the Exide incident. As a result of the closing of the Exide plant, Quemetco is seeking a permit from the State to increase their volume of battery recycling. The supervisor has assembled representatives of County and State environmental departments to assess and monitor the health and environmental conditions of the Quemetco battery recycling plant located in the City of Industry. The group meets regularly to coordinate their work and to assess the results of ground measurements in homes that are in the proximity of the Quemetco plant.

III METHODOLOGY

Interviews

University Professor of Environmental Science

University Professor Urban and Environmental Policy Institute

Medical School Professor

Director Social Justice Foundation

President and CEO Non-Government Air Quality Organization

Executive Director Non-Government Community Environmental Justice Organization

Office of the City of Los Angeles Attorney

Document Reviews

UCLA Institute of the Environment & Sustainability, 2015 Environmental Report Card UCLA

Liberty Hill Foundation – Drilling Down, Fall of 2015

Liberty Hill Foundation – Hidden Hazards, December 2010

California Sustainable Freight Action Plan, July 2016

South Coast Air Quality District Management, I-710 Corridor Project EIR

South Coast Air Quality District Management, Air Quality Management Plan 2016

Media Sources

Los Angeles Times

San Gabriel Valley Tribune

Pasadena Star News

Website of South Coast Air Quality District Management

⁶⁵ Barboza, Tony, Los Angeles Times, “Kuehl named to regional air quality board”, December 12, 2016

IV FINDINGS

1. The Board of Supervisors has taken the first steps to address environmental oversight and monitoring by convening a task force to review oil and gas facilities compliance to regulations and requesting the Chief Executive Officer to prioritize needs in environmental health oversight and monitoring. The County will benefit from an environmental oversight and monitoring strategy that coordinates federal, state and county agencies responsible for environment oversight.
2. The CGJ found that environmental experts we interviewed recognize health to be a factor that needs to be included in defining many regulations. Health risk enforcement requires the expanded role and authority for public health analysis in the permitting process of land-use planning, zoning, business license, and building permits. The DPH should participate in recommending health components in compliance regulations and participating in the approval process.
3. Enforcement agencies have a need for more and better evidentiary data as described in the section Data and Monitoring.
4. The CGJ found that there is a causal relation between the conditions of “bad toxin contamination” and “bad health”. Pollution has had negative health impacts on groups of residents and is likely to have further health impacts on larger groups if it is not corrected.
5. The myriad of federal, state, and local regulatory agencies have compartmentalized authority be air, water or soil resulting in a silo approach to enforcement. Enforcement authority within the County is mostly uncoordinated but the DPH is trying to change that. The DPH is piloting a promising model that identifies high health risk areas using CalEnviroScreen data, identifying clusters industrial facilities that use or generate similar toxin materials. It then conducts inspection with the appropriate County, State or Federal partner agencies. A recent example of action taken by the DPH pursuant to Section 11.02.190 of the Los Angeles County Code, they exercised its’ authority to abate operations of an industrial facility that endangered public health by emitting hexavalent chromium in the city of Paramount.
6. The CGJ found that communities *disproportionately burdened* by multiple sources of pollution are primarily of color, have low incomes and are under-served⁶⁶, although risk to toxic exposure cuts across all levels of society and income. Overburdened communities sense a lack of environmental justice when they compared the government response times between the Porter Ranch gas leak and the Boyle Heights lead contamination. Professionals that were interviewed by the CGJ say that the public and community groups have lost trust in government agencies.

⁶⁶ Su, Jason G., etc. all. An Index for Assessing Demographic Inequities in Cumulative Environmental Hazards with Application to Los Angeles, CA. *Environmental Science and Technology*. 2009:43. 7626-7634

7. The CGJ found that citizens needing to report toxic conditions affecting them had to navigate through a maze of government agencies to find the correct department with the right regulatory authority to take action. Because enforcement is fragmented by toxin or jurisdiction there currently is no central place to direct citizens to the proper regulatory authority.
8. Environmental justice community based organizations (CBOs) provide a counter balance to industry and government agencies. Through their investigative work and extensive local knowledge, they provide evidentiary environmental data and speak on behalf of people who live and work in high health risk communities. CBOs have views and recommendations and they need to be heard and given the opportunity to be a stakeholder partner with governmental agencies.
9. The opportunity to provide environmental justice to the 28 gateway cities is dependent on the outcome of the proposed I-710 Corridor Environmental Impact Report (EIR). The EIR review is scheduled to be completed in the spring of 2018. Several alternative plans in the EIR require the use of zero emission trucks. These trucks would be powered by electric motors or will receive electric power while traveling along the freight corridor via an overhead catenary distribution system.
10. Residential building permits continue to be issued regardless of scientific data near roadways. Studies show higher incidents of respiratory illness such as asthma and cancer for people living within 300 feet of freeway. A 2012 report from the SCAQMD estimated 1 million people live within 300 feet of a freeway.
11. Repeatedly, the CGJ heard from environmental subject experts and received evidence that confirms the SCAQMD environmental assessment of the Ports of Los Angeles and Long Beach. “The twin ports of Los Angeles and Long Beach are the largest in the nation as well as the single largest fixed source of air pollution in Southern California”.
12. With regards the goods movement industries, Los Angeles County does not receive tax benefit from 40% of goods transported from the San Pedro Bay ports destined for sale outside of the County. However, the County receives the burden of pollution, costs for road repair and detrimental health risks.
13. Scientists and researchers use the Mates and CalEnviroScreen systems at Occidental College Urban and Environmental Policy Institute expressed their need for greater precision and transparency of the data. To the extent that a full capabilities system as described above is not immediately feasible, the system should be designed so that it maximizes capabilities that are currently feasible and is extensible to increased capabilities as they become feasible.

V RECOMMENDATIONS

1. The BOS should adopt the framework described within the document *Environmental Oversight and Monitoring: Building Capacity to Address Environmental Health Threats* proposed by the Los Angeles County Department of Public Health (DPH) in December 2016.
2. The CEO should adequately fund the needed improvements to County preparedness, response and recovery efforts outlined in the DPH proposed environmental oversight and monitoring program titled *Building Capacity to Address Environmental Health Threats*.
3. The County of Los Angeles Department of Regional Planning in collaboration with DPH should revise land-use plans and zoning code as necessary to implement environmental health prevention measures.
4. The CEO in collaboration with DPH should review and propose revision of the regulatory authority for the DPH with regard to business licensing and building and safety permitting related to industries or projects handling toxin elements.
5. The BOS should implement a system that provides measured pollution data, accesses, records, creates warning alarms, and reports the levels of environmental pollution throughout the County in real time.
6. The DPH should conduct a regular occurring forum of County, State, and Federal environmental oversight agencies and other interested parties to include Community-Based Organizations.
7. The DPH should create an Environmental Pollution Ombudsman function. This Ombudsman function would provide a single point of contact between any person believing they are experiencing an environmental pollution event and a County entity able to take immediate, informed action to document and investigate the facts of the event and resolve it.
8. The DPH should establish the scripting to enable “211 LA County” call center representatives to make referrals to the appropriate group within DPH.
9. The DPH should implement a case management system to track case incident reports of suspected hazardous environmental air, ground or water conditions and make the system visible to the public.
10. The CEO should assign a County office with the responsibility to prepare and conduct grant writing training to CBO’s focused on environmental justice. Training should enable CBO’s to solicit grants from local, State, or Federal programs for their local environmental pollution research projects.

11. The BOS should annually conduct an environmental justice grant competition for each of the supervisors' district open to community based organizations.
12. The BOS should select a zero emission design for the I-710 Corridor Project as the best option to protect people from pollution who live and work in proximity of the I-710 corridor and set a new standard for similar future development.

VI REQUEST FOR RESPONSE

California Penal Code Sections 933(c) and 933.05 require a written response to all recommendations contained in this report. Such responses shall be made no later than ninety (90) days after the CG\ publishes its report (files it with the Clerk of the Court). Responses shall be made in accord with Penal Code Sections 933.05 (a) and (b).

All responses to the recommendations of the 2016-2017 Civil Grand Jury must be submitted on or before September 30, 2017, to:

Presiding Judge
 Los Angeles County Superior Court
 Clara Shortridge Foltz Criminal Justice Center
 210 West Temple Street
 Eleventh Floor-Room 11-506
 Los Angeles, CA 90012

Responses are required from:

Responding Agency	Recommendations	Findings
County of Los Angeles Board of Supervisors	6.1, 6.5, 6.11, 6.12	6.1, 6.3, 6.8, 6.9
Los Angeles County Chief Executive Office	6.2, 6.4, 6.10	6.1, 6.2, 6.5, 6.8
Los Angeles County Department of Public Health	6.6, 6.7, 6.8, 6.9	6.5, 6.7,
Los Angeles County Department of Regional Planning	6.3	6.2

VII ACRONYMS

Basin	South Coast Air Basin
BOS	Los Angeles County Board of Supervisors
CBO	Community Based Organization
CE	Cumulative Effect
CEO	Chief Executive Office
CGJ	2016-2017 Los Angeles County Civil Grand Jury
DOGGER	State Department Oil, Gas and Geothermal Energy Resources
DPH	Los Angeles County Department of Public Health
DTSC	State Department of Toxic Substance Control
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
HC	Hexavalent Chromium
PPM	Parts Per Million
TFD	Torrance Fire Department
USC	University of Southern California

VIII COMMITTEE MEMBERS

Henry C. Guerrero	Chair
Douglas Benedict	
Thomas Kearney	
Sharon Muravez	