

# Options for Health Study of Impacts of Well Rupture at Aliso Canyon – Meeting to Gather Community Input on Draft Scope

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Community Meeting in Porter Ranch

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# Agenda

1. Introduction and Background
2. Process and Roles
3. Presentation of Study Options
4. Break-out Groups -- Discussion
5. Break-out Groups -- Report Back
6. Q&A
7. Next Steps and Timeline

# Introduction & Background: Who We Are and Why We Are Here

- South Coast Air Quality Management District (SCAQMD)
  - Regional Government Agency
  - Orange and non-desert portions of LA, Riverside and SB Counties
- Legal settlement → \$1,000,000 toward a health study of the impacts of the well rupture at Aliso Canyon and resulting emissions
- Technical experts (Working Group) met to draft a study scope that prioritized the most useful studies within this budget, as well as additional resources that can be put toward this effort
- **TODAY: We are seeking community input to help guide the final scope of the health study**



# Background: what has already been done, and what are the data gaps?

## **What has been done:**

- Many samples of pollutants collected in the community
- Calculations of health impacts based on air toxics measured\*
- Indoor environmental sampling (wipes, air samples)
- CASPER study

## **Data Gaps :**

- Community has experienced health problems that the existing environmental sampling does not explain → need to look more closely at these health symptoms
- Not much known about toxicity of mercaptan odorants

\*Health Impacts Estimates summary: <http://www.aqmd.gov/home/regulations/compliance/aliso-canyon-update/health-impacts-estimates>

# Roles

Name	Who this Includes	Role(s)
<b>Working Group (WG)</b>	Representatives from agencies and 2 faculty from universities	<ul style="list-style-type: none"> <li>• Develop <u>draft</u> scope</li> </ul>
<b>Health Study Technical Advisory Group (HSTAG)</b>	All members of the WG, plus 2 community members identified by the PRNC	<ul style="list-style-type: none"> <li>• Provide technical scientific advice and feedback on study scope, progress, and findings.</li> <li>• Integrate community input into <u>final</u> study scope.</li> <li>• Provide updates to community and researchers.</li> </ul>
<b>The Community</b>	Members of the public	<ul style="list-style-type: none"> <li>• Provide input on the study scope</li> <li>• Participate in the study</li> <li>• Provide feedback to HSTAG on study progress and findings</li> </ul>
<b>Proposal Review Panel</b>	Scientists with relevant expertise	<ul style="list-style-type: none"> <li>• Review and score proposals received through the RFP process</li> </ul>
<b>The Researchers</b>	Scientists conducting the studies	<ul style="list-style-type: none"> <li>• Design and conduct the studies</li> <li>• Report progress and findings</li> </ul>

# Details on the Roles of the Health Study Technical Advisory Group (HSTAG)

## BEFORE THE STUDY BEGINS

- Integrate community feedback into the final study scope
  - Ensure that the proposed studies are scientifically valid and would provide meaningful scientific data
- Prioritize study components and elements to be part of final scope
  - These will go into a Request for Proposal (RFP) or sole-source contracts, as applicable

## AFTER THE STUDY BEGINS

- Conduct technical review of study progress and interim findings
- Provide technical guidance to researchers, if needed
- Address community questions or concerns about the study
- Provide updates to the community, and technical feedback to the researchers

NOTE: Because the HSTAG is finalizing the study scope, the HSTAG members will not be able to apply for this funding to conduct the study

# Process + Timeline

## Nov-Dec 2017

- Working Group drafts scope
- PRNC identifies 2 community members for HSTAG



## Dec 2017 – Apr 2018

- Community provides input on draft scope
- HSTAG integrates community input and finalizes scope
- SCAQMD staff writes scope into RFP or sole-source contracts
- SCAQMD issues RFP and/or sole-source contracts



## Jun – Sep 2018

- Proposal Review Panel reviews and scores proposals
- SCAQMD Board authorizes funding for studies
- Researchers begin studies



## After studies begin

- HSTAG meets quarterly to discuss study progress, provide input to investigators as needed
- HSTAG provides updates to community

## Highest Priority Health Study Components Identified by the Working Group for \$1 million budget

<b>Study or Study Component</b>	<b>Approx. Cost Estimate or Agency Contributing Resources</b>
Clinical assessment survey of highly affected individuals	\$1,000,000
Data integration and exposure modeling	\$500,000
Community engagement	SCAQMD to conduct
Records-based epidemiologic study using public data	LA County Public Health to conduct
Toxicity screening assays	U.S. EPA, if able to accommodate



# Other potentially useful activities identified by the Working Group

Study or Study Component
Records-based epidemiological study using data from large private medical provider (e.g. Kaiser or similar)
Establishing a health registry

# Study Components That Can Be Done in Addition to the \$1 million Health Study

# Community Engagement

## General description

- SCAQMD coordinated with other agencies and community leaders to organize tonight's public meeting to gather feedback from the community on the health study scope
- SCAQMD will create the Health Study Technical Advisory Group (HSTAG)
- SCAQMD will organize community meetings to keep the public informed, and to seek additional input as needed

## Notes

- SCAQMD will conduct this work outside of the \$1 million health study budget

# Community Engagement (continued):

## Strengths

- Ensures that community input informs the study priorities and scope
- Increases public participation and transparency
- Keeps the public informed of progress and results

## Limitations

- None noted, other than time commitments for everyone

# Records-based epidemiologic study using public data

## General description

- Use data to evaluate trends and patterns in hospital admissions and emergency room visits in the Porter Ranch area compared to other areas
- Data provided by the California Office of Statewide Health Planning and Development (OSHPD)

## What information this could provide

- Whether certain serious health conditions were increased in certain areas in specific months or years

## Notes

- LA County Public Health, with technical assistance from the California Department of Public Health, will conduct this work outside of the \$1 million health study budget

# Records-based epidemiologic study using public data (continued):

## Strengths

- Looks at data from a large population
- Can look at many different types of health problems
- Uses a complete database of hospital admissions and emergency room visits, at public and private hospitals
- Compares across different communities and time periods
- Accounts for some other basic factors that affect health risk (e.g. age, gender)

## Limitations

- Can only evaluate conditions that would normally cause people to go to the hospital or emergency room
- May not be able to account for other factors that affect health risks
- Cannot say whether the exposures caused the health symptoms in a specific person

# Toxicity screening assays: Description

## General description

- Conduct toxicity screening assays on the odorants used at the Aliso Canyon facility
  - U.S. EPA ToxCast program



## What information this could provide

- Screening-level information on the potential toxicity of these compounds

## Notes

- Methods for testing these compounds are still under development; timing uncertain
- If U.S. EPA is able to accommodate this request, these tests would be conducted outside of the \$1 million health study budget

# Toxicity screening assays: Strengths & Limitations

## Strengths

- Provides some general information about the potential toxicity of the odorants
- Indicates whether certain chemicals are more concerning compared to others (i.e. helps prioritize which compounds to test in traditional toxicology studies)

## Limitations

- Testing methods still under development
- Results may be hard to interpret (these assays are relatively new, and the science is still developing)
- Not a replacement for traditional toxicology testing



# Overview of Study Options for spending the \$1 million health study budget

# OPTION 1: Clinical assessment survey of highly affected individuals

## General description

- Conduct a clinical assessment survey of about 100 people
- Describe the types of health symptoms or health problems they have experienced and/or continue to experience
- Focus on people who have experienced serious health symptoms
- May include some environmental sampling at participants' homes

## What information this could provide

- Data on which health symptoms, diagnoses, and/or illnesses are being experienced by some of the most affected people in the community
- Information on possible patterns in the health effects and environmental exposures in this group

# OPTION 1: Clinical assessment survey of highly affected individuals (continued):

## Strengths

- Collects detailed health symptom information using scientifically rigorous methods
- Focuses on health symptoms that people have experienced or are experiencing
- Focuses on a select group of highly affected people
- Captures information on a range of health effects
- Provides data on specific health conditions in the community

## Limitations

- Can only assess a limited number of people
- May be hard to say if the community has been more affected compared to others
- May be more difficult for people to remember details about past health problems
- Cannot say whether the exposures caused the health symptoms in a specific person

# OPTION 2: Data integration and exposure modeling

## General description

- Evaluate existing data from health complaints, the CASPER study, outdoor air samples and other environmental samples (indoor air and wipes, soil) that were collected by public agencies in 2015-2017
- Conduct exposure modeling of outdoor and indoor exposures
- If data are available, can also account for other air pollutant exposures (e.g. diesel trucks used in the well-kill operations)

## What information this could provide

- Creates “exposure maps” of the pollutant levels that the community was exposed to
- Identifies potential patterns in the exposures and health symptoms

## Notes

- If this option is selected, there will be some funds available to spend on additional efforts

# OPTION 2: Data integration and exposure modeling (continued):

## Strengths

- Makes use of existing data to estimate what the community was exposed to
- Can be used to calculate health risks across the main affected areas (using exposure map)
  - Note: Health Impact Estimates were already done based on monitoring data

## Limitations

- Health risk calculations can only evaluate risks for pollutants with established risk assessment health values
  - Does not include mercaptan odorants

# Break-out Groups: Discussion Questions

1. What geographic area do you define as the “affected community”?
2. Rank these proposed studies/study components from highest to lowest priority:
  - OPTION 1: Clinical assessment survey of highly affected individuals
  - OPTION 2: Data integration and exposure modeling
  - Other study ideas?
3. What are the most important health problems the community has experienced that you would want to look at in a clinical assessment or records-based epidemiologic study?
4. Are there specific groups of people that a clinical assessment should look at?
  - A “group” could be children under age 5, school-age children, elderly, people with asthma, pregnant women, etc.
5. Are there any concerns about or suggestions for the 3 studies/study components that the agencies are proposing to do outside the \$1 million budget (community engagement, records-based epidemiologic study using public data, toxicity screening assays)?

# Break-out Groups -- Report Back

# Questions & Answers (Q&A)



# Next Steps and Timeline

- Jan 2018:
  - SCAQMD staff will compile input from community, share with HSTAG
- Jan-Apr 2018:
  - HSTAG convenes to discuss and integrate community input into final study scope.
  - SCAQMD staff integrates scope into RFP, seeks Board approval to release RFP.
- Jun-Sep 2018:
  - Researchers submit proposals to SCAQMD
  - Proposal Review Panel reviews and scores proposals
  - SCAQMD staff seeks Board approval to authorize funding for studies
  - SCAQMD staff finalize contracts
  - Researchers begin studies

# Contact Information

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