

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

Jo Kay Ghosh

Health Effects Officer

jghosh@aqmd.gov

South Coast Air Quality Management District

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

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

Study or Study Component	Approx. Cost Estimate or Agency Contributing Resources
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

Jo Kay Ghosh

Health Effects Officer, SCAQMD

jghosh@aqmd.gov

(909)396-2582

Leeor Alpern

Sr. Public Information Specialist, SCAQMD

lalpern@aqmd.gov

(909)396-3663