Study of Neighborhood Air near Petroleum Sources (SNAPS): Inglewood Oil Field Communities Draft Air Monitoring Plan Overview

Baldwin Hills Community Advisory Panel Meeting
June 2022

Study of Neighborhood Air near Petroleum Sources

- Study air quality in neighborhoods
- Select neighborhoods close to oil and gas extraction facilities
- Characterize cumulative impact from surrounding sources

Scope

Program Goals

Characterize air quality in communities near oil and gas operations

Identify emission sources as feasible

Analyze data for **possible health risks**

Major Pollutants

Toxic Air Contaminants (TACs)

Criteria Pollutants
Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), Ozone (O_3)

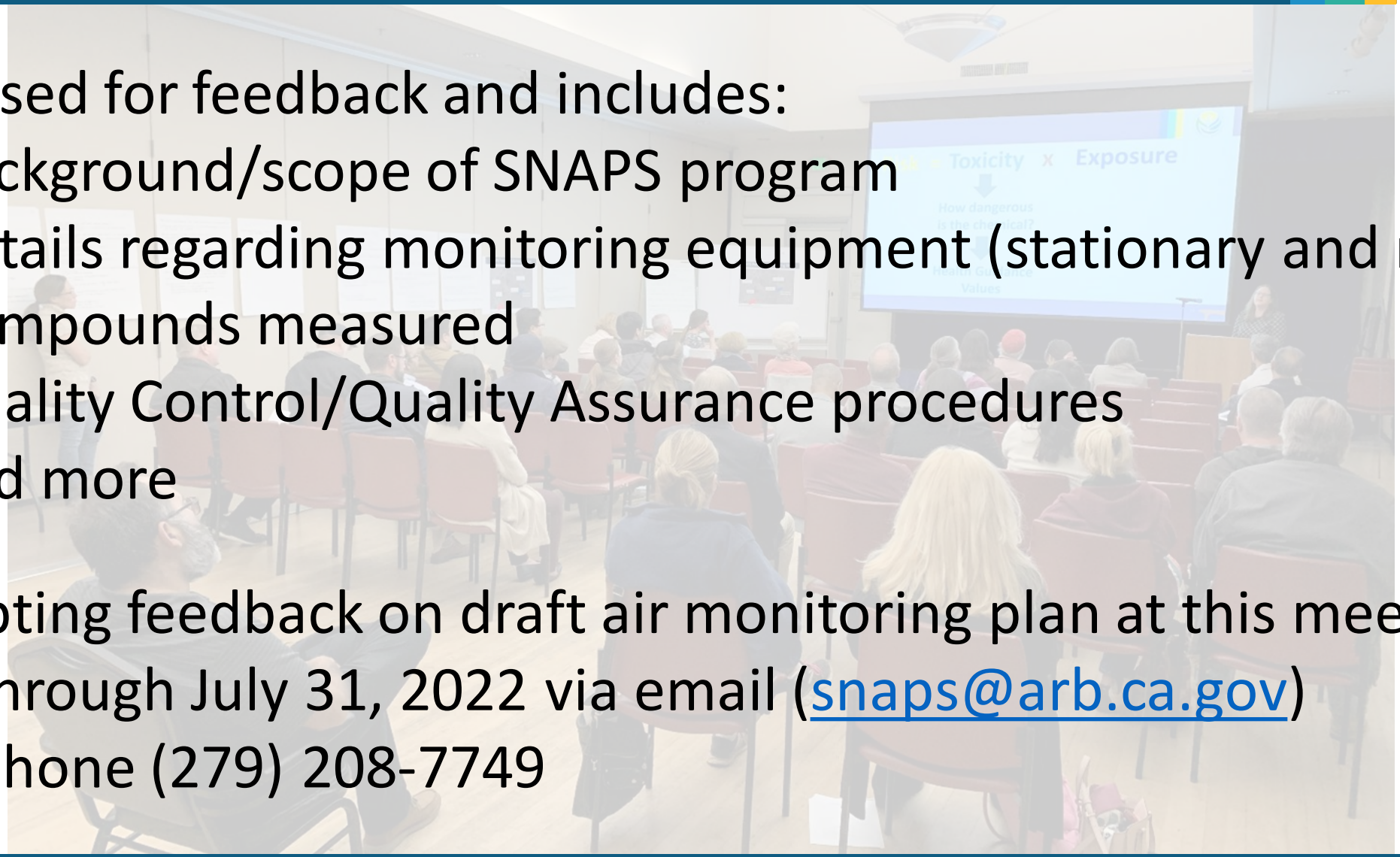
Volatile Organic Compounds (VOCs)

Methane (CH_4)

Hydrogen Sulfide (H_2S)

Metals

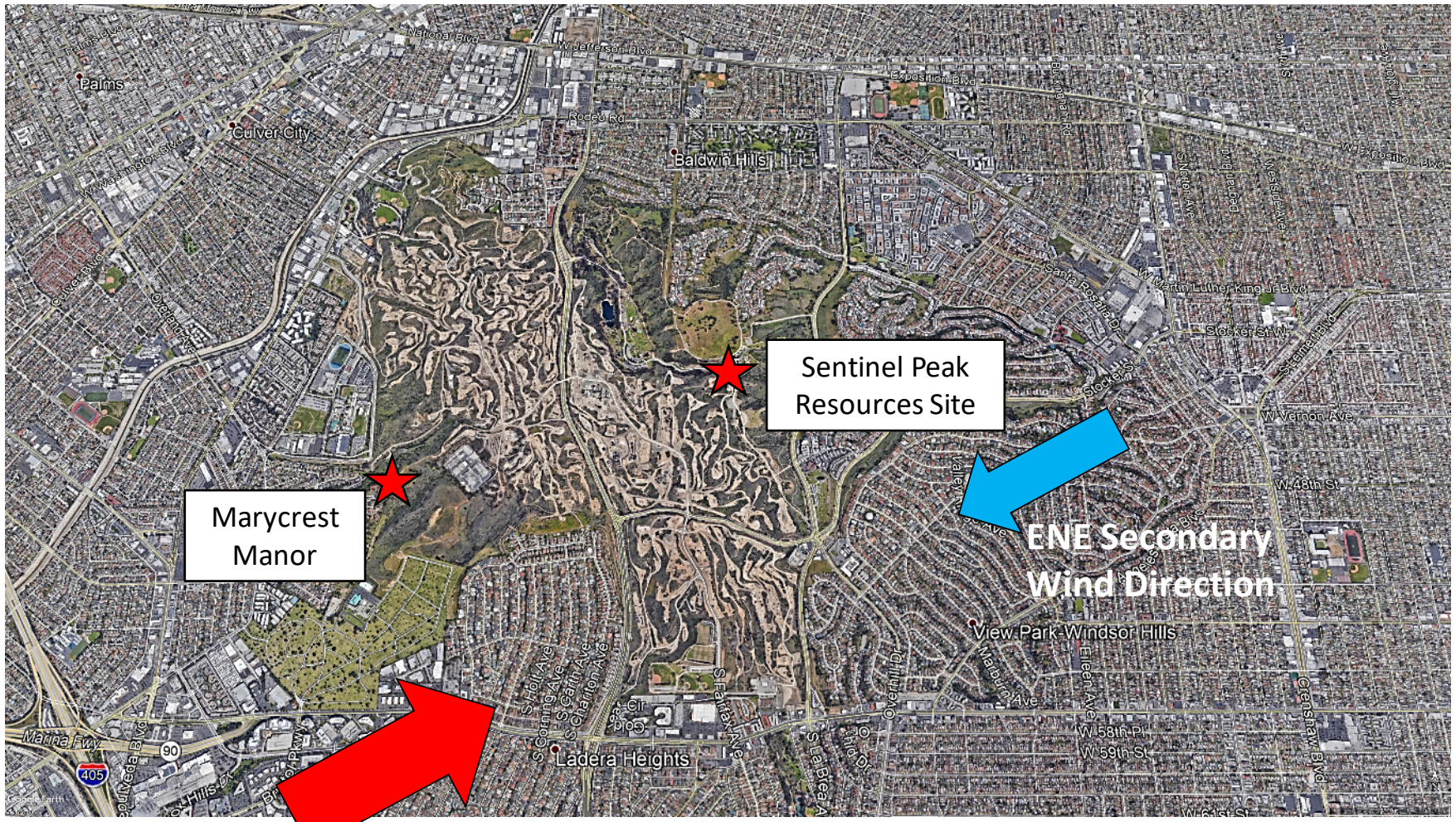
Draft SNAPS IOF Communities Air Monitoring Plan



- Released for feedback and includes:
  - Background/scope of SNAPS program
  - Details regarding monitoring equipment (stationary and mobile)
  - Compounds measured
  - Quality Control/Quality Assurance procedures
  - and more

- Accepting feedback on draft air monitoring plan at this meeting, and through July 31, 2022 via email (snaps@arb.ca.gov) and phone (279) 208-7749

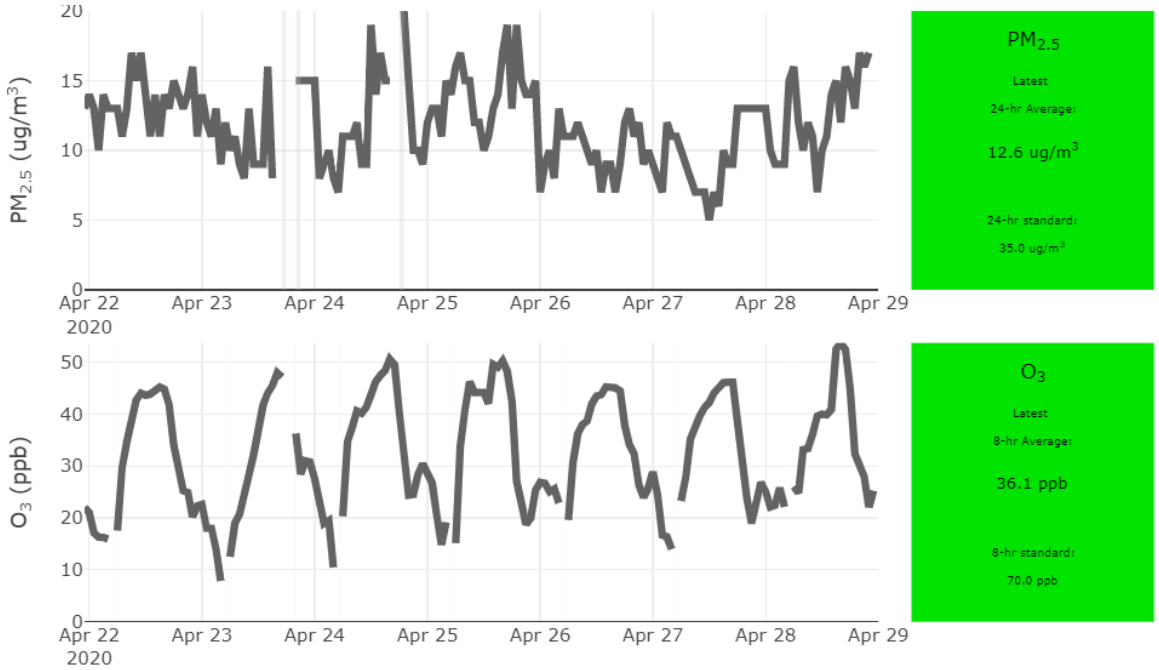
Stationary Monitoring



- Sentinel Peak Resources Site: Site on eastern edge of oilfield (near Kenneth Hahn State Recreation Area)
- Marycrest Manor: Site west of oilfield
- Duration: 12 months, likely beginning Fall 2022 (tentative)
- Equipment housed in climate-controlled trailers
  - On-site measurements
  - Discrete samples
  - Meteorological data

Communication of Results

Measurement	Pollutants	Time to Public Posting of Data
On-site Instrumentation	CH_4, H_2S, O_3, CO, $PM_{2.5}$, black carbon (BC)	Hourly
Discrete Samples	Toxic air contaminants (TACs), non-TAC VOCs and metals	With published report



- Concentrations of some pollutants measured through on-site instrumentation streamed hourly on project website
- Final report detailing results for all pollutants published following monitoring completion
  - Mid-monitoring meeting (to be scheduled) will include preliminary results for first several months of monitoring

Stationary Monitoring:
On-site vs Discrete Measurements (Appendix A)

On-site Measurements

- Fast response instrumentation (seconds to minutes)
- Continuous
- Compounds include those posted to our website in near real-time (CH_4, H_2S, O_3, CO, $PM_{2.5}$, BC); some VOCs and metals

Discrete Measurements

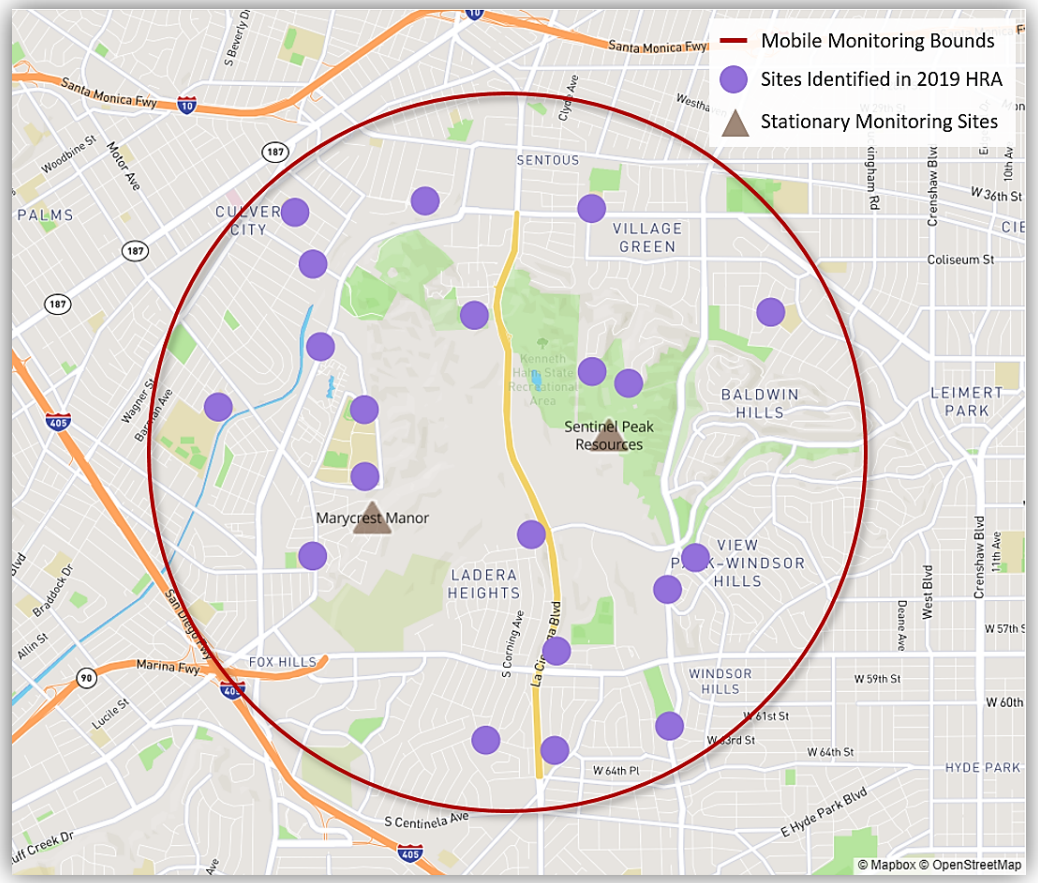
- Requires lab analysis
- 24-hr measurements taken every 6 to 12 days
- Compounds include aldehydes, polycyclic aromatic compounds (PAHs), and sulfur-containing compounds

Mobile Monitoring

- Instruments housed within a vehicle
  - Measures methane, ethane, black carbon, ozone, and hydrogen sulfide continuously
  - BTX (benzene, toluene, xylenes) measurements every 15-30 minutes

- Frequency: 2 weeks per quarter, with about 6 hours per day and at least 3 days per week of monitoring
  - Various times of day (e.g., early morning)
  - Different days of the week

- Preliminary locations based on 2019 IOF Health Risk Assessment

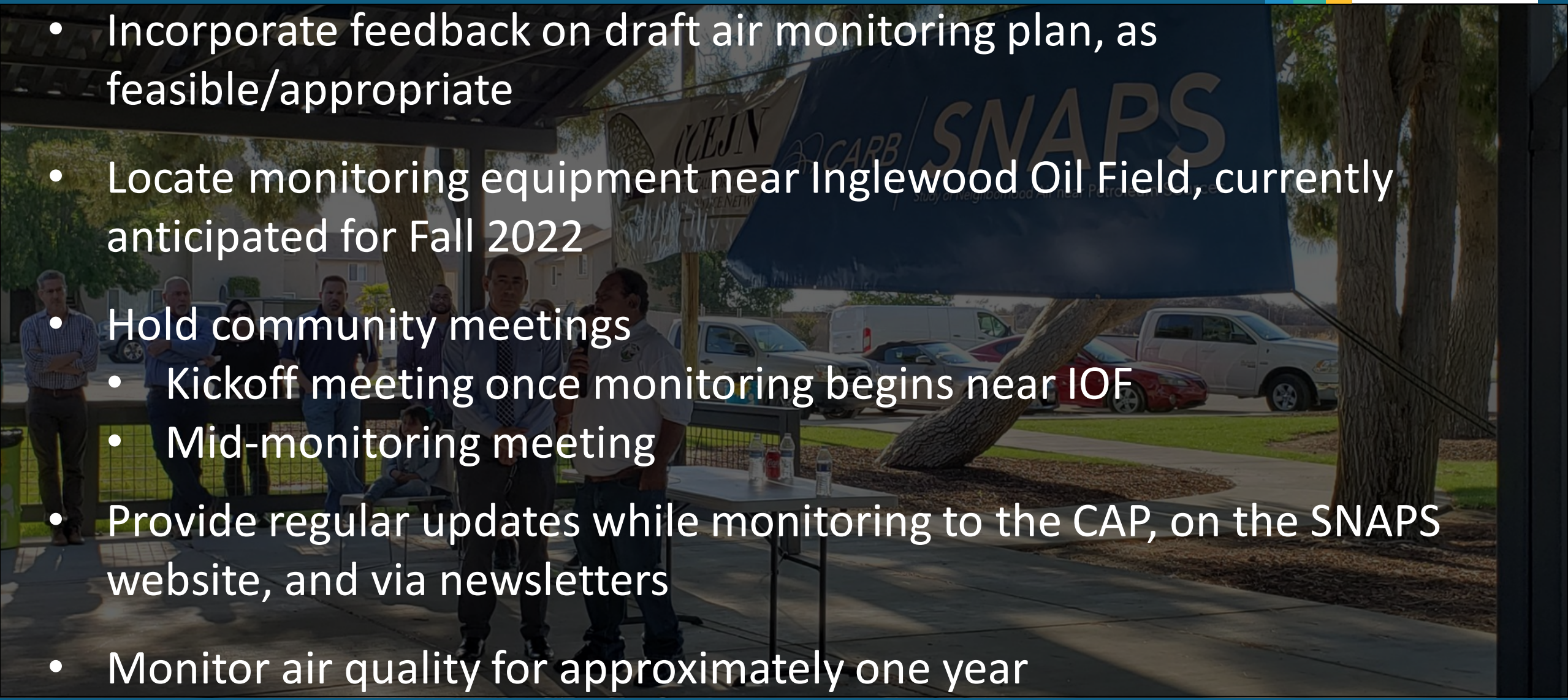


Additional Info in Air Monitoring Plan

- Background on other air quality work around the IOF (including CSD)
- Roles and responsibilities of CARB and Office of Environmental Health Hazard Assessment (OEHHA)
- Data Quality Objectives (e.g., QA/QC schedule, data acceptance criteria)
- Details on air monitoring equipment
- Quality Assurance and Quality Control (QA/QC)
- Data Management
- Complete list of proposed compounds to be measured

Draft Baldwin Hills Air Monitoring Plan is now posted on the SNAPS Webpage – please submit feedback to snaps@arb.ca.gov or call (279) 208-7749. Accepting feedback through July 31, 2022.

Next Steps



- Incorporate feedback on draft air monitoring plan, as feasible/appropriate
- Locate monitoring equipment near Inglewood Oil Field, currently anticipated for Fall 2022
- Hold community meetings
  - Kickoff meeting once monitoring begins near IOF
  - Mid-monitoring meeting
- Provide regular updates while monitoring to the CAP, on the SNAPS website, and via newsletters
- Monitor air quality for approximately one year