

PROPOSED ADVANCED MONITORING DURING MATES V

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Development & Area Sources

Administrative Committee Meeting

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ADVANCED MONITORING PROGRAM TO COMPLEMENT MATES V

MATES V

- Fixed site monitoring (10 sites)
- Emissions inventory
- Health risk modeling

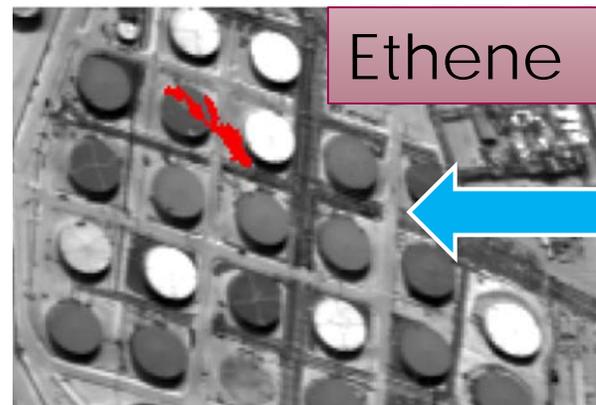
Advanced Monitoring Program

- Flight-based measurements
- Mobile laboratory
- Optical tent
- Sensor networks and community engagement

FLIGHT-BASED AIR TOXICS MEASUREMENT AEROSPACE CORPORATION



- Survey large areas, including refinery areas
- Detect plumes & emissions
- Focus ground-based efforts



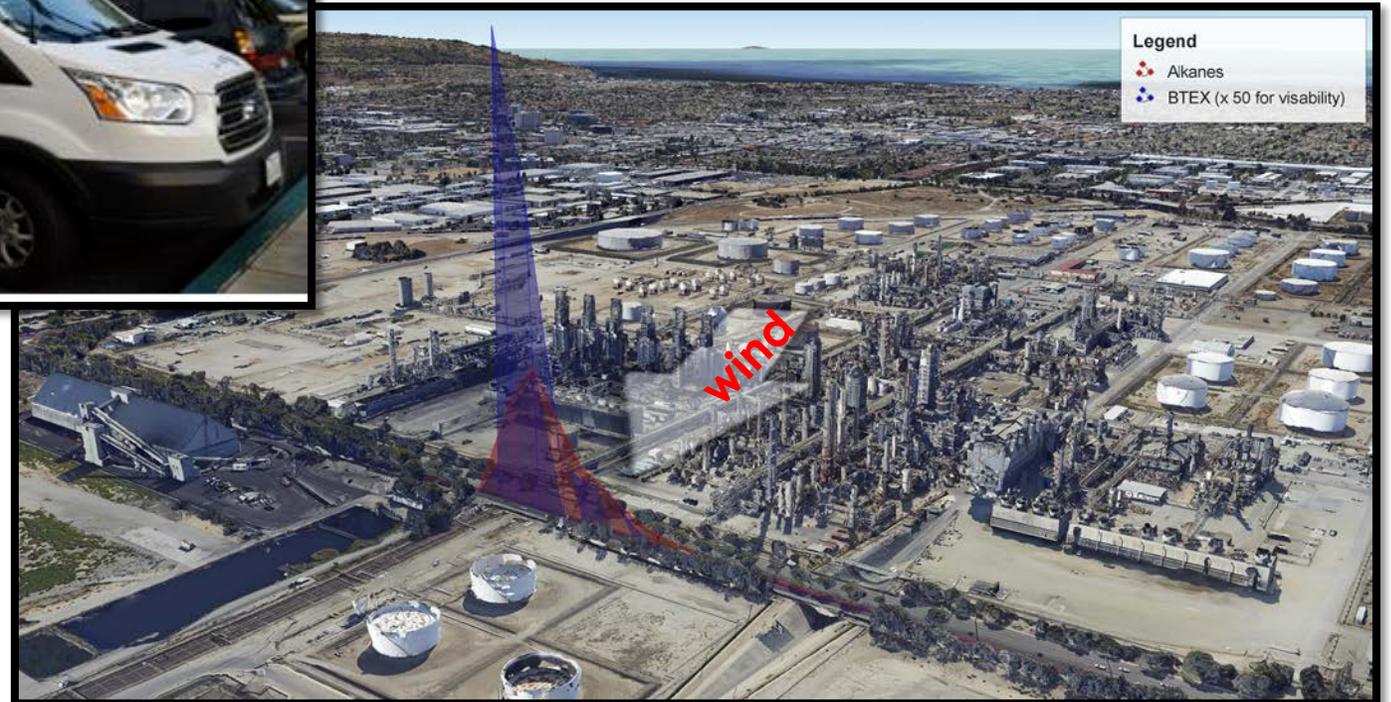
MOBILE AIR TOXICS LABORATORY

FLUXSENSE, INC.



- Survey major refineries and other petroleum facilities

- Fenceline and community mobile monitoring
- Identify sources and community levels



OPTICAL TENT (FACILITY-BASED AIR TOXICS MONITORING)

UCLA

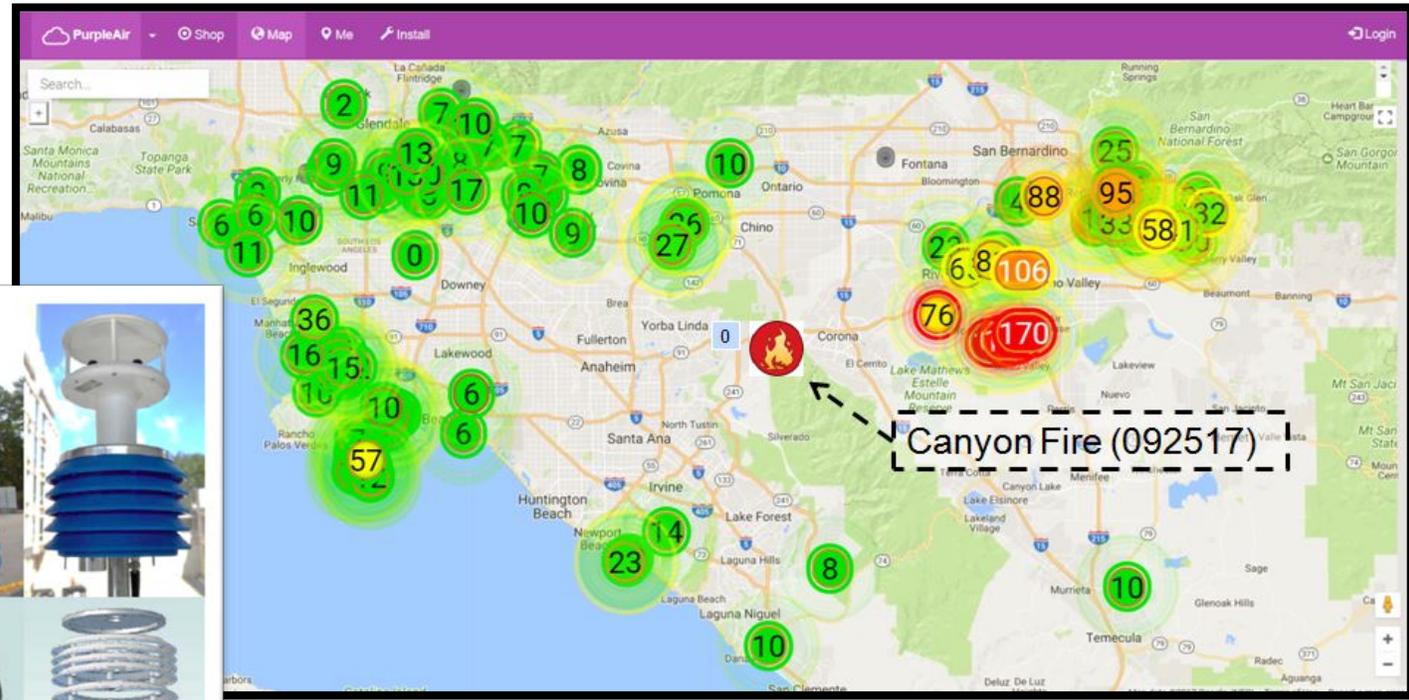


- Continuous facility monitoring
- Real-time leak detection
- Quantify long-term emissions

SENSOR NETWORKS & COMMUNITY ENGAGEMENT

QSENSE AND SCAQMD

- Detailed local data
 - PM: 2 communities
 - VOCs: 1 near-refinery community
- Community engagement
 - Air quality & sensor training
 - Needs assessment
 - Inform air quality improvement projects



INTEGRATING NEXT-GENERATION AIR TOXICS MONITORING



By air



At the facility



By land



In the community

RECOMMENDED ACTIONS

- Transfer and appropriate \$3,671,010 from the Rule 1118 Mitigation Fund to the General Fund, for the MATES V advanced monitoring program, FY17-18 through FY19-20
- Authorize sole-source contracts:
 - UCLA: Optical tent, up to \$880,000
 - Aerospace Corp: Flight-based air toxics measurements, up to \$192,000
- Authorize sole-source purchase orders:
 - FluxSense, Inc.: Remote sensing equipment and services, up to \$1,300,000
 - PurpleAir: Low-cost PM2.5 sensors, up to \$21,250
- Execute contract:
 - Qsense, Inc.: Low-cost VOC sensor network deployment, up to \$700,000
- Authorize RFQs and purchase orders:
 - Mobile platform for remote sensing equipment, up to \$110,000
 - Automated gas chromatography equipment and services, up to \$300,000