SAN DIEGO COUNTY

AIR POLLUTION CONTROL DISTRICT

INCIDENT RESPONSE PLAN

September 2021

Table of Contents

1. Executive Summary

This Incident Response Plan (IRP) outlines the San Diego Air Pollution Control District (APCD) response to major releases of air contaminant(s) that may cause adverse health consequences to the public and result in a multi-agency response. This IRP identifies that APCD is not a first responder agency or emergency response coordination body but will work within the Incident Command System (ICS) to minimize public exposure to air contaminants using APCD's area of expertise. This expertise includes ambient air sample collection, ambient air monitoring, laboratory analysis, odor inspection, investigation, enforcement, and public information.

This IRP outlines the general framework of the ICS, the various agencies involved in responding to incidents and their roles, as well as outlining how APCD fits into the Unified Command with the various responding agencies' resources and the actions APCD can take. This plan also generalizes the levels of response, depending on the severity of the incident's impact on the surrounding community. Lastly, this plan discusses communication pathways to and from APCD as well as steps the public can take for better incident preparation and information.

2. Purpose/ Introduction

APCD's primary role in an incident response is to monitor the region's air quality, determine if the air quality is meeting Federal and State Standards, identify locales of greatest risk to the public, and share information with relevant agencies and the public. APCD becomes aware of an incident as the result of referrals from other agencies, direct observations, and media reporting.

As provided by State law, emergency response agencies (i.e., California Highway Patrol, Sheriff, local police, local hazardous incident response teams, or local fire agencies) have the primary responsibility for scene management during an accidental release or incident. APCD is neither an emergency response agency, nor a first responder. APCD staff are not trained or equipped to enter the "Hot Zone." The "Hot Zone" refers to the area around the incident that is considered hazardous and necessitates specialized safety equipment and specialized training. APCD's role in incident response is to contribute in an advisory or support capacity to responding agencies. This is accomplished by utilizing APCD resources and expertise for air sample collection, air monitoring, laboratory analysis, inspection, investigation, enforcement, and public messaging.

Incident response is an organized approach to addressing and managing the series of events during and after a major incident. In the case of incidents with air quality impacts, the goal is to handle the incident in a way that limits public exposure to air contaminants and minimizes the impact of the incident. This IRP defines what constitutes an incident and provides a process to follow when incidents occur.

APCD is defining an incident as:

> *Any release of air contaminants into the environment that may cause adverse health consequences to the public and results in a multi-agency response*.

Examples of incidents include wildfires and large-scale industrial fires (such as the fire aboard the USS Bonhomme Richard in 2020). Complaints (including but not limited to dust, odor, or asbestos) and prescribed agricultural burns are not considered incidents. APCD follows established protocols to respond to air quality complaints that do not rise to the level of an incident and prescribed agricultural burns.

More information regarding the Complaint Program can be found:

https://www.sdapcd.org/content/sdc/apcd/en/compliance-programs/air_quality_complaints.html

More information regarding the agricultural burn forecast can be found:

https://www.sdapcd.org/content/sdc/apcd/en/ag-burn-decision.html

More information regarding the agricultural burn rule (101) can be found:

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Burning_Control/APCD_R101.pdf

3. Participating Agencies

No single community or agency has sufficient resources to cope with all major incidents. Therefore, during a significant incident, multiple agencies must work closely together to coordinate their efforts. This formation of a collaboration of agencies is called Unified Command. In Unified Command, the role of incident commander is shared by two or more individuals, each having authority in a different responding agency. APCD's role in an incident is that of a supporting agency and not a lead agency for incident response/coordination.

If the incident occurs on Federal, Tribal, or Military land/property, a Federal agency will be the lead agency and that agency is responsible for managing the incident. Following ICS, that agency will communicate with State and local mutual aid partners and, if additional resources are needed, requests will be made to the appropriate State and local agencies. If an incident has an air quality impact, APCD may be notified by California Environmental Protection Agency (CalEPA), California Air Resources Board (CARB), California Office of Emergency Services (CalOES), County of San Diego Office of Emergency Services (CoSD OES), or an incorporated city within the county. Figure 1 displays the Command Structure for incidents occurring on Federal, Tribal or Military land/property.
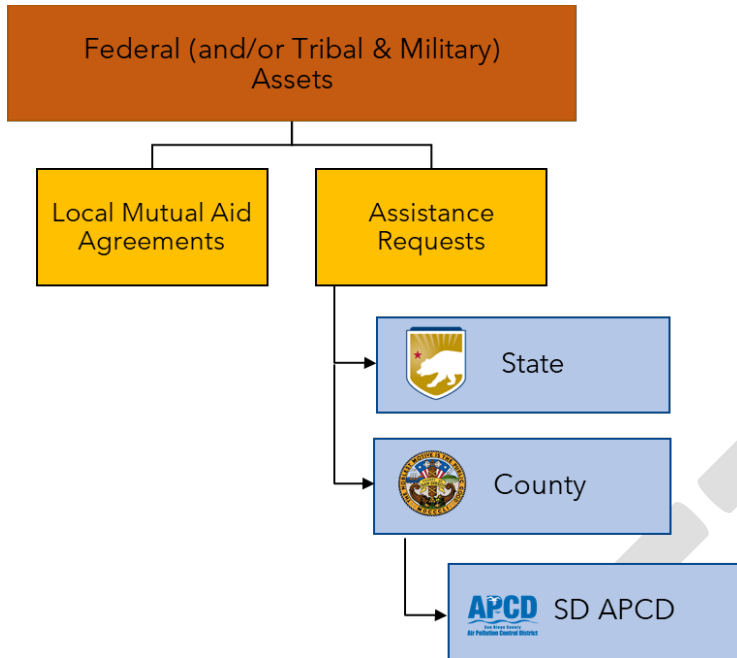
Figure 1: Command structure for incidents occurring on Federal, Tribal, or Military Property

If an incident were to occur in the unincorporated areas of San Diego County or in more than one of the incorporated cities, the Operational Area Emergency Operations Center (OAEOC) may be activated. If the OAEOC is activated and the incident has an air quality impact, APCD will have a seat in the OAEOC to aid in coordination. Figure 2 displays the Command Structure for incidents occurring in the unincorporated area of San Diego County or in more than one of the incorporated cities.
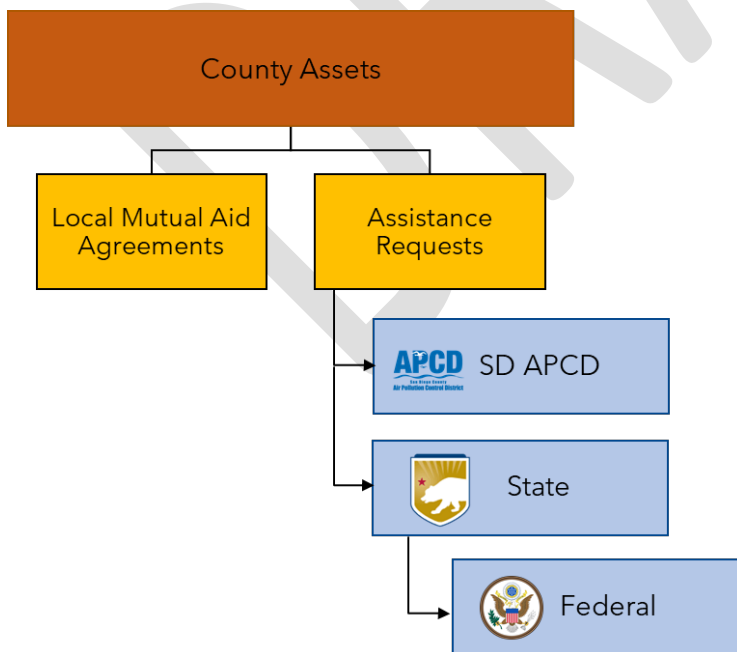

Figure 2: Command structure for incidents occurring in San Diego County cities or unincorporated areas

There will be several agencies involved in response to an incident: each one supporting the other within their areas of expertise. Table 1 lists a selection of various Federal, State, and local agencies and their role during an incident response.

> **NOTE**: *Table 1 is not intended to be an exhaustive list of responding agencies, but examples of the different agencies.*

Most information regarding Table 1 can be found in the County of San Diego's Operational Area Emergency Operations Plan and is displayed here to present an overall picture of the various agencies that are involved in an incident response. For more information on the County of San Diego's Operational Area Emergency Operations Plan, please visit the County of San Diego's Office of Emergency Services website at:

https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html

Table 1: A Selection of Responding Agencies and Their Role in an Incident

Agency	Role
Federal Agencies (i.e., Military, Bureau of Land Management)	Lead agency if on Federal, Military or Tribal and. Coordinates all other agencies' activities, including public communication & establishing evacuation centers
EPA[1] Region 9 / CARB[2]	Assists with lending air monitoring equipment
CA OEHHA[3]/ CoSD[4] HHSA[5]	Advises Incident Commander on health risk from smoke and potential public health interventions to mitigate it. Assists with communication and public outreach message
CoSD[4] Office of Emergency Services	Lead emergency management agency if on County or City land. Coordinates all other agencies activities, including public communication establishing evacuation centers, FEMA[6] coordination, disaster assistance.
CoSD[4] Department of Environmental Health and Quality (DEHQ)	Minimize loss of life and human suffering, prevent disease, monitor and mitigate environmental factors, stabilize chemical, biological, radiological, and nuclear incidents
CoSD[4] DEHQ Occupational Health Program	Assists Department of General Services on indoor air quality issues in County buildings, conducts air monitoring (asbestos, lead, mold, smoke/dust) as needed.
Operation Area Fire and Rescue Coordinator	Response to fire danger and fire suppression; gives and enforces evacuation orders
American Red Cross	Operation of evacuation points and or shelters
APCD	Monitors and forecasts ambient air quality in region, determine if Federal or State standards are being exceeded, issues smoke advisory – includes where smoke is headed and identify areas at greatest risk of smoke impacts
Office of Emergency Services for Individual Cities	Varies by Cities. Examples: assisting with community safety and emergency preparedness awareness and public outreach, trained in basic first aid, light search and rescue, small fire suppression

[1]EPA: Environmental Protection Agency
[2]CARB: California Air Resources Board
[3]CA OEHHA: California Office of Environmental Health Hazard Assessment
[4]CoSD: County of San Diego

[5]HHSA: Health and Human Services Agency
[6]Federal Emergency Management Agency

4. Agency Actions and Desired Outcomes

During an incident, various agencies will be working both independently and together to address the incident and mitigate any potential harmful effects to the public. Table 2 shows some of the air quality related actions that the incident response agencies typically perform, who is responsible for performing those actions and the desired outcome of the action taken. The agencies listed in **BOLD** in the *Lead Agency and Action Taken* column are lead agency; other agencies listed there not in bold are support agencies.

Table 2: Agency Actions Related to Air Quality During an Incident and Desired Outcomes

Air Quality Related Action Needed	Lead Agency and Action Taken	Desired Outcome
Air Monitoring		
Measuring ambient air quality	Mostly **APCD** as lead agency for ambient air quality monitoring, but **EPA Region 9** or **CARB** may provide additional monitoring equipment and may assist in deployment and data collection	Ability to track ambient air quality levels in communities receiving the heaviest impact, and identify areas where air quality is better
Indoor air quality exposure	**OSHA**[1]/ **DEH OHP** is lead agency to evaluate indoor air quality concerns for County workers	Ability to monitor indoor smoke levels in work environment and schools
Air Quality Forecasting		
Air quality forecast	**APCD** is the lead agency	Provide advance notice of possible air quality impacts, conduct public notification to help lower risk of public exposure to elevated levels of air pollution
Issuing Health Warnings		
Provide public with frequent updates on potential health risks from air contaminants and recommended public health actions via the web and media	Coordination between the CoSD **OES**, **HHSA, APCD**, and 2-1-1	Frequent coordinated updates provided to the public via an incident command structure, APCD, HHSA, local government websites, press releases and media outreach. 2-1-1 is provided with up-to-date health related information
Provide advisories to specific areas and on multiple agency media platforms	Coordination between **OEHHA, CoSD OES, HHSA,** and **APCD**	Discuss current Air Quality conditions, forecasted air quality, location of likely impacts and duration to coordinate advisory

		messaging on OES platforms and APCD information outlets
Website Management		
Updating APCD, HHSA, Cal Fire websites	Managed by respective agency	Provide the public website/social media on wildfire status, air quality levels, health risk, cleaner air spaces, press releases and other critical info
Public Actions		
Cancel or modify public events, outdoor, and business activities	Decision made by local or city government or **local public health authorities** in consultation, as needed, with APCD and OSHA[1]	Prompt action taken, via notification of media, 2-1-1, and posting info on other websites
Consult with schools on limited hours or closure. Decisions about protecting schools or other public buildings from smoke intrusion	Decision made within affected jurisdiction, by **HHSA, or City government** in consultation with OEHHA, APCD, or OSHA[1] as needed	Identification of measures to protect schools and users of public buildings from smoke
Set up general population shelters	**Red Cross** may support the setup and management of general population shelters based on decisions by **local health officials**	When determined necessary, general population shelters will be established and opened in coordination with local public health authority and emergency management
Establish or identify public cleaner air spaces	Decisions made within affected jurisdiction, by **HHSA** in consultation with APCD, OEHHA or OSHA[1] as needed	When determined necessary, prompt action taken to set up or identify cleaner air spaces
Recommended evacuation/ relocation of sensitive populations or populations in general	Decision made at local level, by health officials and tribal/local government (**Sheriff or CoSD OES**), in consultation with APCD, HHSA, and possibly OSHA[1]	Prompt action taken if dangerous smoke levels are expected to persist for a prolonged period. Requires close communication with APCD, HHSA, CoSD OES, OSHA[1], 2-1-1, and possibly Red Cross, State Fire Marshal and State Police

[1]Occupational Safety and Health Administration

a. Activation Process

When APCD is informed that an incident has occurred by the Unified Command, APCD will follow its internal notification procedure, as seen in Figure 3, and notify the appropriate staff. Staff will evaluate the incident information to determine what APCD's response should be and what resources, if any, should be deployed in response to the incident. If the incident doesn't rise to the level where deployment of resources is necessary, staff will continue to assess the incident for any changes and will reevaluate if deployment of resources are needed. If any resources are deployed, then the PIO within APCD will be

notified as well as the APCO. The APCO and staff will be in close contact with the incident/ unified command in coordinating public messaging.
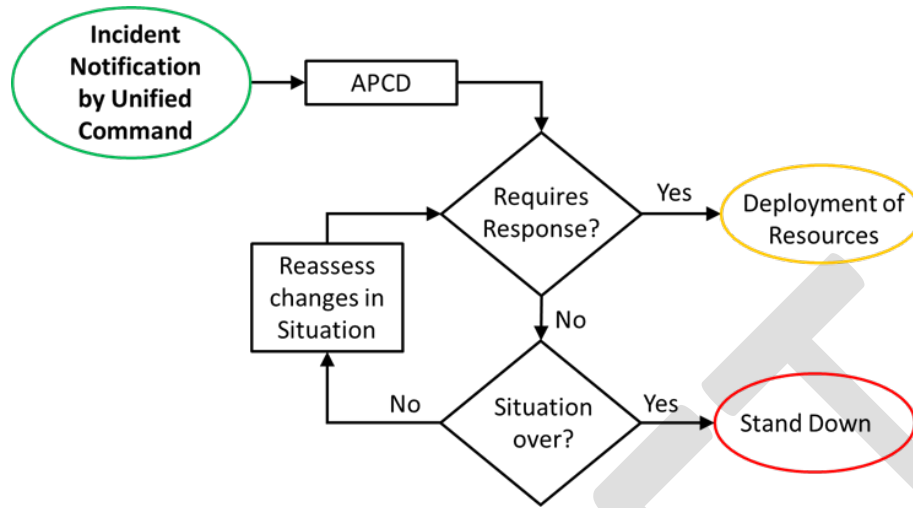

Figure 3: APCD's incident internal notification and deployment of resources process

       b.   Activation Levels

Table 3 identifies the four activation levels in the County of San Diego's Operational Area Emergency Operations Plan. These levels are determined by the size, scale, and scope of an incident. More information regarding the County of San Diego's Operational Area Emergency Operation Plan can be found here:

https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html

Table 3: County of San Diego's Operational Area Emergency Operations Plan Activation Levels

ACTIVATION LEVEL	CONDITIONS / DEFINITION
Monitoring Incident Status	• Duty Officer Status • Steady State Operations • OES maintains situational awareness
Level 3	Small to moderate disaster / pre-planned event
Level 2	Large-scale disaster requiring high amount of state involvement
Level 1	Catastrophic disaster which requires comprehensive state-level response and/or assistance

APCD's response for each of the levels would be:

Monitoring Incident status – APCD may be notified by CoSD OES to evaluate the situation. General information regarding protecting oneself from smoke is available on our website, and if needed, a smoke advisory will be issued specific to the incident and locations that are affected.

> **NOTE**: *If an incident warrants,* APCD *will issue a smoke advisory. Typical smoke advisories contain information on where the fire is located, the areas affected by the smoke, meteorological conditions affecting the smoke, estimated particulate matter levels, estimated susceptible*

population groups, and actions to take to limit exposure to the smoke. The smoke advisory will be displayed on APCDs Smoke Advisory webpage and a prominent link to this page will be on APCD's homepage. It will also be communicated through social media and in the near future will also be disseminated by the San Diego National Weather Service Office.

Activation Level 3 – APCD would be notified by CoSD OES to evaluate the situation. APCD resources would be deployed and utilized as needed. APCD's Air Pollution Control Officer (APCO) and Public Information Officer (PIO) will be notified.

Activation Level 1 & 2 – APCD would be notified by CoSD OES to evaluate the situation. APCD resources would be deployed and utilized as needed. APCD's APCO and PIO will be notified. If APCD capabilities are exceeded, the next step would be that APCD would reach out to CARB who may in turn reach out to EPA Region 9 for additional resources. Both agencies keep their equipment in Northern California, so these requests would only be useful for longer duration incidents due to the time scale of the equipment's arrival.

A discussion on the different resources that could be deployed is included in **Section 5: Current Monitoring Equipment**. A discussion on how APCD will be notified of an incident is included in **Section 6: Communication**.

       c. Deployment of Resources

Each incident is unique in its own way; no two incidents are identical. Thus, the deployment of resources will be decided for each incident on a case-by-case basis. There are several factors that must be considered when deciding on the best course of action. Some of these factors include current and expected duration of the incident, the nature of the incident including the likely air contaminants involved and proximity to population centers, the rate of spread of the incident, the population exposure, and the meteorological parameters (wind speed, wind direction, relative humidity, ambient temperature, expected near-term future rainfall, etc.), as well as staff and equipment security, laboratory analysis time, and the like.

Once the decision is made to deploy resources (ambient air monitoring equipment) several factors must be considered and decided on. See **Section 5: Current Monitoring Equipment** for more information on the individual equipment. Some of these factors include the following:

- Determine general sampling locations based on expected areas of high concentrations from incident
- Determine if modeling necessary to select areas impacted by the incident
- Determine pollutant(s) needed to be monitored and which equipment should be deployed
- Identify power source and wifi source for equipment that require them
- Identify ways to secure equipment at the selected locations against theft/ vandalism
- Identify/ Determine locations that can support the equipment physically
- Property owner approval to access a facility to site the equipment must be obtained before deployment

Once the above steps have been completed, the equipment can be transported to the sampling location. Once onsite, the equipment must be set up, secured, turned on and warmed up, calibrated, and the data communication set up (if necessary). The above steps and the set-up takes at least 5 hours. It could take longer if any difficulties that arise during the setup. This time will take longer afterhours/ weekends as staff and property owners must be contacted. APCD is working to secure potential future site's access agreements in preparation for future incidents.

> d. Incident Preparedness

In preparation for incidents, APCD participates in Tabletop, Functional, and or Full-Scale exercises. that the various lead incident command agencies organize.

> *NOTE: A Tabletop exercise is a discussion-based session where team members meet in an informal, classroom setting to discuss their roles during an emergency and their responses to a particular incident situation. Many Tabletop exercises can be conducted in a few hours, so they are cost-effective tools to validate plans and capabilities.*
>
> *Functional exercises allow personnel to validate plans and readiness by performing their duties in a simulated operational environment. Functional exercises are designed to exercise specific responding agencies and their staff, procedures, and resources (e.g., communications, warning, notifications, and equipment set-up).*
>
> *A Full-Scale exercise is as close to the real thing as possible. It is a lengthy exercise which takes place on location using, as much as possible, the equipment and personnel that would be called upon in a real incident.*

APCD is committed to regularly updating our contact information with the various offices of emergency services (Federal, County, and City). APCD staff regularly inspect, perform maintenance, test, and calibrate the various pieces of equipment and instruments for its community and regional ambient air monitoring programs, which may also be utilized during an incident response.

APCD executive staff and responding staff have all taken the FEMA Incident Command System (ICS) training classes. These classes provide the basic framework (features, principles, and organization structure) of the Incident Command System, context of the ICS within initial response, and functions of the Emergency Operations Center and Joint Information Center.

5. Current Monitoring Equipment

The following is the list of monitoring equipment that APCD may be used depending on the incident.

Table 4: Current APCD Monitoring Equipment

Equipment	Time to Obtain Data	Capability
Fixed Equipment		

Existing Monitoring Sites	Hourly	Hourly concentrations of ozone, oxides of nitrogen, carbon monoxide, sulfur dioxide, black carbon, $PM_{2.5}$[a], and PM_{10}[b]. Hourly averages of wind speed, wind direction, temperature, relative humidity, barometric pressure, solar radiation, and rainfall
Existing Monitoring Sites	At least 2 days	24-hour integrated samples for $PM_{2.5}$[a], toxic volatile organic compounds (VOCs), metals including lead, carbonyls, and ions
Deployable Equipment		
Summa Canister[b] or Tedlar Bag	At least 2 days	Grab samples for lab-based analysis for VOCs
Met One E-BAM	Hourly	Hourly concentrations of $PM_{2.5}$[a], PM_{10}[a]
Purple Air Sensors	Hourly	Minute concentrations of $PM_{2.5}$[a]
Met One BC-1060[b]	Hourly	Hourly concentration of black carbon
Met One E-Sequential[b]	At least 2 days	$PM_{2.5}$[a] or PM_{10}[a] filter-based sampler. Filters can be used for lab-based determination for mass or metals
Portable Meteorological Equipment	Hourly	Measures wind speed, wind direction, solar radiation, temperature, relative humidity, and rainfall

[a]$PM_{2.5}$ and PM_{10} are particulate matter with diameters less than or equal to 2.5 or 10 micrometers, respectively
[b]These are backup or readily available instruments for the regional and community ambient air monitoring programs that can be deployed for incident response if needed.

APCD operates nine regional ambient air monitoring sites with permanently located equipment. The regional ambient air monitoring sites are located within the County to provide pollutant coverage to the majority of the inhabited regions of the County.

At these nine locations, ambient concentration data are collected for a wide variety of pollutants, including ozone, oxides of nitrogen, carbon monoxide, sulfur dioxide, black carbon, lead, particulate matter with diameters less than or equal to 2.5 or 10 micrometers. APCD also measures volatile organic compounds (VOCs), metals, carbonyls, ions, and a host of meteorological parameters. While not all pollutants are monitor at all sites, most sites monitor for multiple pollutants. A particular site's location and monitoring purpose determine the actual pollutants measured at that site. Please see APCD 2020 Annual Network Report for more details regarding the regional ambient air monitoring program.

https://www.sdapcd.org/content/dam/sdc/apcd/monitoring/2020_Network_Plan.pdf

APCD also operates four community-based ambient air monitoring sites. The community-based monitoring sites are in the Portside Communities, including Barrio Logan, Logan Heights, Sherman Heights, West National City. This program is expanding into the Border Communities of San Ysidro and Otay Mesa.

The monitoring objective for this program is to measure black carbon, elemental and organic carbon, metals, toxic VOCs, ions, hexavalent chromium, and a host of meteorological parameters. Please see APCD website for more details on this program.

https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-.html

Using the equipment listed in Table 4, APCD can sample, monitor, and analyze for a wide range of pollutants, with some measurements made in near real-time (i.e., data every hour). For measurements that require laboratory analysis, data will not be available until a few days later.

> **NOTE:** *In general, instruments that measure specific pollutants (individual toxic organic compounds such as benzene, formaldehyde, individual metals such as lead, chromium, arsenic, etc.) require laboratory analyzes and thus a few days to obtain the data. Whereas instruments that measure generalities (i.e., total volatile organic compounds, particulate matter) can be measured in real-time. The exception to this 'rule' are the gaseous criteria pollutants (ozone, nitrogen dioxide, carbon monoxide), which are specific pollutants and can be measured in real-time.*

      a. Pollutants that APCD can Measure using Deployable Equipment

APCD can measure $PM_{2.5}$/ PM_{10}, black carbon, wind speed, and wind direction in near real-time. APCD can measure 56 toxic volatile organic compounds (VOCs) and 15 metals utilizing APCD's laboratory-based instruments after collecting samples from the field.

> **NOTE**: *These 56 VOCs are based on EPA's Toxics Organic list of carbon-based compounds and are all the VOCs APCD can quantify.*

EPA has developed an easy-to-understand daily air quality tool for ozone, $PM_{2.5}$ and PM_{10} (and three other pollutants) called the Air Quality Index (AQI). The AQI is based on the health-based national ambient air quality standard. It uses color-coded categories and provides statements for each category regarding air quality, which groups of people may be affected, and steps that can be taken to reduce exposure to air pollution.

> **NOTE:** *The standard for $PM_{2.5}$ and PM_{10} is based on a 24-hour average. Comparing 1-hour data to the 24-hour standard is not advisable.*

Black carbon, the 56 toxic volatile organic compounds, and 15 metals do not have a national ambient air quality standard, and thus, do not have an AQI. Most of these compounds have either a cancer risk value (for cancer) or a reference exposure level (for non-cancer). Determining cancer risk or non-cancer risk from pollutant concentrations is done by health professionals (for example, a toxicologist or epidemiologist). APCD will coordinate with the appropriate agencies (California Office of Environmental Health Hazard Assessment and/or the County of San Diego's Public Health Department) on interpretation of the health effects from the pollutant measurements.

6. Communication

      a. Communication **to** APCD

When emergency management agencies receive notification of an incident, the protocol is to notify appropriate response agencies. If an incident occurs, the County's Office of Emergency Services will notify APCD. APCD has 24 hours a day, seven days a week capability.

> **NOTE:** *Since APCD is not a first responding agency, APCD will not be directly notified of an incident by the first responder agencies. The first responder agencies will notify the local emergency*

management agency, who then would notify APCD as part of their outreach to other responding agencies.

As discussed in **Section 3: Participating Agencies**, when an incident occurs on Federal, Military, or Tribal land, the appropriate Federal agency is the lead agency and will form an incident command team and then notify the State and local emergency management agency.

b. Communication **from** APCD

APCD will notify the public that APCD is responding to an incident through their website and social media. If a Unified Command is established the responding agencies' PIOs will gather the agencies' information and will coordinate the unified command's public messaging, including APCDs. This works to ensure all agencies communicate the same public message.

> **NOTE:** *If the Emergency Operations Center is activated by County's Office of Emergency Services, then a joint information center (JIC) would be established.*

During an incident, APCD will also use social media to update and inform its followers of any new information that APCD is disseminating through other means (press releases, interviews, website announcements, etc.). APCD has various listservs and those may also be used as part of APCD's incident response outreach.

APCD has a permanent webpage dedicated to incidents, where smoke advisories as well as information regarding smoke are posted. This webpage, see below, will have a prominent link from our homepage during an active incident and will include all APCD generated information related to the incident, including, as appropriate, a map of the incident and the location of any supplemental samples, any advisory issued, and the data and what it means for the public's health.

https://www.sdapcd.org/content/sdc/apcd/en/incident-response.html

APCD, when appropriate, will coordinate through the Unified Command or JIC, if formed to issue press releases, conduct interviews with local TV and radio stations, and issue a Public Service Announcement.

APCD has partnered with the San Diego National Weather Service to issue air quality alerts through the National Weather Service wireless emergency alerts, which will automatically deliver messaging directly to people's cell phones. This partnership will result in an increased number of residents receiving air quality alerts during incidents and will begin by the end of 2021.

Lastly, APCD is in the process of creating a Public Participation Plan. This Plan will help APCD increase public engagement with APCD activities and notifications. The general outreach activities contained in the Plan will benefit APCD's outreach effort during an incident.

7. Public Actions

There are several actions that members of the public can take to protect themselves from the air pollutants released during an incident. First and foremost is to have a plan and be prepared. San Diego County is prone to wildfires and as is evident from the 2003, 2007, and 2014 wildfires, they can be devastating and happen at any time.

a. Protect Yourself From Smoke

Below are some of the recommendations from CARB and U.S. EPA to protect oneself from smoke. APCD has a permanent webpage dedicated to address impacts of smoke and ways the public can protect themselves (see **Section 7e: Visit San Diego County APCD Website** below).

DO

- Stay Inside
- Pay attention to local advisories and check air quality
- If driving in areas of heavy smoke, set car air conditioning to recirculate
- Use a well fitted N-95 or P-100 respirator if outside and smoky
- Prepare to evacuate if smoke levels get too high
- Keep indoor clean by:
  - Closing windows and doors
  - Close fresh intake on air conditioning units
  - If you home gets too warm, try to stay with friends or relatives
  - Use a portable air cleaner with HEPA filters properly sized for the room
  - Construct a temporary box fan air filter using a box fan, an air filter, and duct tape

DON'T

- Play or exercise outdoors
- Fry or broil foods, which can generate indoor particulate matter
- Use a fireplace, gas logs or gas stove
- Smoke indoors
- Vacuum, which can stir up dust

   NOTE: Wildfire smoke is a mixture of gases and fine particles that can irritate eyes and respiratory systems and worsen chronic heart and respiratory diseases. The quantity and duration of smoke exposure, as well as a person's age and degree of susceptibility, play a role in determining if someone will experience smoke-related health effects. Persons with pre-existing health conditions such as asthma or other chronic respiratory conditions and cardiovascular disease, people older than 65 years, infants and children, pregnant women, and smokers are particularly sensitive to smoke. Individuals who are more likely to be exposed to smoke for long periods of time will also experience health effects. These include people who work outdoors such as farm workers; those who live outdoors or are experiencing homelessness; those with disability, access, and functional needs; and those with low income who are more likely to live in housing that does not provide adequate protection from smoke. Unfortunately, communities of color and/or of lower economic standing tend to disproportionately experience these vulnerabilities.

   Small airborne particles in smoke, commonly referred to as particulate matter, pose a serious risk to public health. The potential health effects vary depending on the size of the particles and the composition of the smoke. Particles larger than 10 micrometers can irritate the eyes, nose, and throat. Particles smaller than 2.5 micrometers (PM$_{2.5}$) can be inhaled deeply into the lungs and enter the bloodstream, increasing the risk of cardiovascular and respiratory problems. When smoke levels are high, even healthy people may experience symptoms.

b. Download the SD Emergency App

APCD strongly recommends that all county residents download the SD Emergency App for mobile devices. The SD Emergency App alerts residents to any incidents in the area and provides a wealth of information regarding planning for incidents such as earthquakes, wildfires, power outages, landslides, terror attacks, tsunamis, and public health emergencies. More information can be found at:

https://www.readysandiego.org/content/oesready/en-us/SDEmergencyApp.html

      c.   Subscribe to Alert San Diego

Alert San Diego is a regional mass notification system where residents can register their cell phone numbers, Voice over Internet Protocol (VoIP) phone numbers, and email addresses to receive notifications from emergency response personnel regarding information during an emergency, incident, or disaster. Landlines for homes and businesses and including those that register their cell phones and other devices will be notified with information on the event and or actions to take for emergencies in their area (such as evacuations or to shelter in place). More information can be found at:

https://www.readysandiego.org/content/oesready/en-us/alertsandiego.html

      d.   Call 2-1-1 for General Information

2-1-1 serves as the region's 24-hour non-emergency information line during an emergency or disaster, relaying details about road closures, evacuation routes, food assistance programs, shelters, and more to those in need. During an emergency, 2-1-1 works around the clock to ensure San Diegans have the most updated information at their fingertips. 2-1-1 helps with rumor control, trend analysis, and feedback from the public on emerging needs—all of which eases the burden on 9-1-1 whose dispatchers must respond to those in immediate danger. More information can be found at:

https://211sandiego.org/disasterservices/

      e.   Visit San Diego County APCD Website: www.sdapcd.org

During an incident with air quality impacts, APCD will have information regarding the incident prominently displayed on its website. Any deployment of resources will be identified and displayed. If supplemental monitoring is conducted, the results will be displayed and discussed on the incident webpage. APCD also has a permanent webpage dedicated to address impacts of smoke and ways the public can protect themselves.

https://www.sdapcd.org/content/sdc/apcd/en/incident-response.html

      f.   Follow APCD on Social Media

APCD has a Facebook page and Twitter account. As part of our outreach efforts to inform the public during an incident, these pages will be updated with the latest information. In addition to incidents, APCD also utilizes these social media accounts to inform the public regarding other APCD information.

g. Join APCD Listserv

APCD also maintains and utilizes a listserv to share APCD news and information, including information on new regulations, public workshop notifications, etc. While this listserv is not dedicated to incident response communication, during an incident, it will be a part of APCD's outreach efforts. Residents can sign up to receive APCD news and information at:

https://public.govdelivery.com/accounts/CASDCAPCD/subscriber/new

8. Appendix A: Acronyms

APCD	Air Pollution Control District
APCO	Air Pollution Control Officer
AQI	Air Quality Index
BC	Black Carbon
CalEPA	California Environmental Protection Agency
CalOES	California Office of Emergency Services
CARB	California Air Resources Board
CoSD	County of San Diego
DEHQ	Department of Environmental Health and Quality
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GC-MS	Gas Chromatography - Mass Spectrometry
HHSA	Health and Human Services Agency
ICS	Incident Command System
IRP	Incident Response Plan
JIC	Joint Information Center
OAEOC	Operational Area Emergency Operation Center
OHP	Occupational Health Program
OSHA	Occupational Safety and Health Administration
OES	Office of Emergency Services
OEHHA	(California) Office of Environmental Health Hazard Assessment
PM10	Particles with diameter less than 10 micrometers
PM2.5	Particles with diameter less than 2.5 micrometers
E-BAM	Portable Environmental Beta-Attenuation Monitor. Used to quantify particle matter in air in near real-time
PIO	Public Information Officer
REL	Reference Exposure Limit
TO-15	Toxic Organic. Method to determine Volatile Organic Compounds in air collected in canisters
VOC	Volatile Organic Compound
VoIP	Voice over Internet Protocol