

Mitigation Plans for Exceptional Events in Texas

November 26, 2018

Developed by the Texas Commission on Environmental Quality

I. Background Information

Required Mitigation Plans and Timelines

Section 319(b) of the Federal Clean Air Act (FCAA) governs the identification of air quality monitoring data as exceptional events and how that data may be excluded from consideration for air quality regulatory purposes. The EPA adopted rules in 40 Code of Federal Regulation (CFR) §§50.14 and 51.930 to implement section 319, requiring states to adopt and implement mitigation plans in areas with historically documented or known seasonal events. As specified in the October 3, 2016 Exceptional Event rule, Texas is required to submit mitigation plans covering two areas, identified below due to past Exceptional Events. The plans are due September 30, 2018 (two years from finalization of the rule).

Pollutant	Event	County
PM _{2.5}	African Dust	Harris County
PM _{2.5}	High Winds	El Paso County

The Texas Commission on Environmental Quality anticipates that measures outlined in this Mitigation Plan for the areas and pollutants listed above also generally apply to other counties (Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller) as well as for ozone in these counties. We anticipate the mitigation plan will be revised as necessary to cover other areas and pollutants.

II. Mitigation Plan Components

A. §51.930(a)(1-3) and §51.930(b)(2): Public notification and education programs for affected or potentially affected communities

- The TCEQ has mechanisms in place to forecast future and assess current air quality and to promptly notify the public when air quality concentrations of criteria pollutants exceed or are expected to exceed an applicable short-term National Ambient Air Quality Standard (NAAQS). When possible, these notifications take place at least 48 hours in advance of the event. These programs utilize methods appropriate to the communities being served. These include measures such as the following:

- The TCEQ Air Quality Index (AQI) Report (https://www.tceq.texas.gov/cgi-bin/compliance/monops/aqi_rpt.pl), which displays the latest and historical daily AQI measurements and is available online for the public to access.
- The Today's Texas Air Quality Forecast (https://www.tceq.texas.gov/airquality/monops/forecast_today.html), which is a four- day forecast that is also disseminated via email using GovDelivery (<https://public.govdelivery.com/accounts/TXTCEO/subscriber/new>) and available on the agency social media accounts: (<https://twitter.com/TCEONews>). The TCEQ distributes the daily air quality forecasts through multiple avenues. In addition to being available through email for interested parties, they are posted on the agency website and Twitter feed.
 - The daily forecast is a combined categorical forecast utilizing the EPA's Air Quality Index (AQI) for ozone, PM_{2.5}, and PM₁₀.
 - The methods used for these forecasts follow the EPA Guidelines for Developing an Air Quality (Ozone and PM_{2.5}) Forecasting Program (EPA-456/R-03-002, June 2003). The TCEQ employs the following specific methods from this guidance: Persistence (Section 4.1.1 of guidance document), Climatology (4.1.2), Criteria (4.1.3), Regression Equations (4.1.5), Deterministic Air Quality Modeling (4.1.7), and the Phenomenological/Intuition Method (4.1.8).
 - The TCEQ has added language to the daily forecast email template and webpages to indicate when the forecasted particulate matter (PM) levels are anticipated to exceed the applicable short-term NAAQS and to direct the public to webpages that describe how to reduce exposure as well as how to reduce emissions that contribute to PM levels.
- The TCEQ also provides near real-time hourly PM_{2.5} and ozone measurements from monitors across the state, which are available to the public on the TCEQ website (<https://www.tceq.texas.gov/agency/data/pm25.html> and https://www.tceq.texas.gov/cgi-bin/compliance/monops/select_curlev.pl).
- The monitoring data collected by the TCEQ as well as the forecasts described above are also submitted to EPA's AirNow (www.airnow.gov) for public display.
- Through its website, the TCEQ provides the public with technical, health, personal activity, planning and legal information, and resources concerning PM and ozone pollution. The TCEQ maintains fact sheets, as discussed below, which point individuals to additional health-related information from the Centers for Disease Control and Prevention, the Texas Department of State Health Services (DSHS), the Texas Department of Transportation, and the EPA. The TCEQ will coordinate with the DSHS, to ensure that relevant information from that agency is listed on the TCEQ website. At the same time, the TCEQ will ensure that the DSHS is provided with updated information relevant to Exceptional Events as that information becomes available. See protocol in Appendix B – Regular Communication and Outreach Plan.
- The TCEQ provides for public education concerning actions that individuals may take to reduce exposures to unhealthy levels of air quality during and following an exceptional event. For example, the agency maintains a webpage addressing air pollution from particulate matter <https://www.tceq.texas.gov/airquality/sip/criteria-pollutants/sip-pm> and ozone <https://www.tceq.texas.gov/airquality/sip/criteria-pollutants/sip-ozone>, which provide basic information as well as measures citizens can take to protect themselves from unhealthy levels of PM and ozone. Similar information is available at EPA's AirNow Webpage where TCEQ forecasts and current data are displayed.

- The TCEQ also participates in outreach and educational opportunities throughout the state through work with regional air quality planning committees, advisory committees, local air pollution control programs, and through public informational meetings.
- The TCEQ Border Initiative is a comprehensive, cooperative effort to serve border residents. The TCEQ oversees its own stand-alone activities and also works with local, state, and federal stakeholders to maximize efforts aimed at improving the environment of the U.S.-Mexico border region. Information on these activities are available in English and Spanish on the agency [website](#).
- The Joint Advisory Committee (JAC) for the Improvement of Air Quality in the Ciudad Juárez, Chihuahua; El Paso, Texas; and Doña Ana County, New Mexico, air basin was established in 1996 to allow the local community to participate as partners across borders in the improvement of air quality in the Paso del Norte region. Through its [website](#), the JAC provides air quality information from the TCEQ and partner agencies.
- Through the [Take Care of Texas](#) (TCOT) program, the TCEQ provides educational outreach, including measures the public can take to maintain good air quality. This material is available online through the program [website](#), and is also available in the form of publications for electronic download and [hard copy](#) in English and Spanish.
- The TCEQ also administers an Ozone Action Day forecast program for nine participating metropolitan areas across the state. This program is described at <https://www.tceq.texas.gov/airquality/monops/ozonefacts.html> under the “What is an ozone forecast?” heading. When TCEQ meteorologists forecast an Ozone Action Day, the National Weather Service is contacted, which then broadcasts the information across its “weather wire,” which is available online at <http://www.nws.noaa.gov/airquality/>. The National Weather Service also coordinates with the National Oceanic and Atmospheric Administration (NOAA) to distribute information via the NOAA Weather Radio service, which is described at <http://www.nws.noaa.gov/nwr/>. The TCEQ contacts officials in affected areas so that local community clean-air coalitions can notify media, government, business, and industry.

B. §51.930(b)(2)(ii): Steps to identify, study and implement mitigating measures

- When the TCEQ becomes aware that an Exceptional Event is likely to occur (e.g. approaching wildfire or dust storm), and the daily forecast indicates air quality conditions will be of sufficient severity (e.g. AQI of purple, indicating conditions are Very Unhealthy), additional measures to abate or minimize contributing controllable sources of identified pollutants that are within the jurisdiction of the agency will be considered on a case-by-case basis. Otherwise, the agency will rely on existing and future agency rules, SIP requirements, and permitting measures for reasonable controls and existing mechanisms for public outreach. For example, the daily forecast will notify the public when levels of PM or ozone are expected to exceed the applicable short term NAAQS (AQI of orange).
- The TCEQ addresses contributing controllable sources of pollutants through permitting of local sources and expects that existing controls will help minimize concentrations of identified pollutants.
- Other actions may include mandatory or voluntary measures, consideration of full-time or contingent controls on event-related as well as non-event related sources. These types of measures have been described in previous Exceptional Events demonstrations for

Harris and El Paso Counties, as well as SIPs for those areas and are available through the TCEQ website:

- [Particulate Matter Data Proposed Exceptional Event Flag Demonstrations](#)
 - [Ozone Data Exceptional Event Flag Demonstrations](#)
 - [Houston-Galveston-Brazoria and the State Implementation Plan](#)
 - [El Paso and the State Implementation Plan](#)
 - [Reducing emissions from vehicles, construction equipment, boats, lawn equipment and various non-stationary sources of air pollution.](#)
- In the event of an Exceptional Event, the most effective measure to reduce exposure may be public notification. Therefore, measures may also include issuing advisories to the public. For example, citizens may be encouraged to:
 - Conserve electricity; consider setting your thermostat a little higher in the summer and lower in winter.
 - Participate in local energy conservation programs.
 - Keep car, boat, and other engines properly tuned, and avoid engines that smoke.
 - Avoid or slow your vehicle speed on dirt and unpaved roads.
 - Car pool, use public transportation, bike, or walk when possible.
 - Combine errands to reduce "cold starts" of your car and avoid extended idling.
 - Consider using gas logs instead of wood in your fire place or burn only dry, seasoned wood.
 - Mulch or compost leaves and yard waste instead of burning.
 - Refuel your vehicle in the late afternoon or evening and don't top off the tank.
 - Keep your vehicle maintained, including proper tire pressure.
 - Maintain your yard equipment, including changing the oil and replacing air filters regularly. Also consider using tools without motors. Hand tools such as shears, edgers, and push reel mowers are lightweight, quiet, and easy to use, and do not generate emissions.
 - Use paint and cleaning products with less or zero VOC emissions.
 - Measures may also include issuing advisories to businesses, including actions that can help minimize emissions including:
 - Shift work schedules to allow employees to avoid morning rush-hour traffic.
 - Allow employees to work at home (telecommuting).
 - Offer bus passes.
 - For employees who rideshare or use public transportation, provide a guaranteed emergency ride home.
 - Carpool to lunch and meetings.
 - Schedule meetings that don't require driving (meet on site or make conference calls).
 - Offer free drinks at your cafeteria to encourage employees to eat at work.
 - Postpone fueling fleet vehicles until after 6 p.m.
 - Postpone working with mowers, bulldozers, backhoes, tractors, and other two-cycle engine activities.
 - Delay painting, degreasing, tank cleaning, ground maintenance, and road repair.
 - Postpone routine flaring or venting of hydrocarbons.

- Postpone the loading and hauling of volatile organic compound (VOC).
 - Postpone VOC-producing activities such as chemical treatment and catalyst preparation.
 - Switch loads to fired heaters or boilers with low nitrogen oxide burners.
- Methods to minimize public exposure to high concentrations of identified pollutants could include those outlined in Section II.A above.
 - The TCEQ collects and maintains data pertinent to Exceptional Events via an extensive monitoring network, which is described on the agency website: https://www.tceq.texas.gov/agency/air_main.html as well as in the annual Monitoring Network Plan: https://www.tceq.texas.gov/assets/public/compliance/monops/air/annual_review/historical/2016-AMNP.pdf. These resources identify the data the TCEQ collects, the party responsible for collecting and maintaining the data, and when, how, and to whom the data are reported.
 - The TCEQ employs mechanisms to consult with other air quality managers in the affected area regarding the appropriate responses to abate and minimize impacts. These include ongoing efforts with regional air quality planning committees, advisory committees, and local air pollution control programs.
 - One such mechanism is the participation of TCEQ in the [Toxic Substances Coordinating Committee](#) (TSCC). The purpose of the TSCC is to coordinate communication among member agencies concerning each agency's efforts to regulate toxic substances and harmful physical agents. The regular committee meetings occur quarterly.
 - Local Government Advisory Groups https://www.tceq.texas.gov/agency/advise/local_government.html
 - Air Quality Advisory groups https://www.tceq.texas.gov/agency/advise/air_quality_index.html
 - TCEQ regional air quality managers from the impacted area will be periodically updated, and routinely interact with local partners regarding air quality issues.

C. §51.930(b)(2)(iii): Provisions for review and evaluation of the mitigation plan and its implementation and effectiveness by the air agency and all interested stakeholders (e.g., public and private land owners/managers, air quality, agriculture and forestry agencies, the public)

The Exceptional Events Rule stipulates a 30-day public comment period for this mitigation plan. The TCEQ complied with this requirement and scheduled the window from September 19, through October 19, 2018. The Rule also requires a response to comments document that is attached as Appendix E.

The Exceptional Events mitigation plan will also be reviewed periodically and evaluated for effectiveness. Of the options presented in the Exceptional Events Rule as guidance, the TCEQ has elected to do the following:

- (1) The TCEQ will initially review and revise, if appropriate, the mitigation plan every three years. However, if events occur on shorter or longer timeframes, the review,

revision, and recertification would occur with a more appropriate frequency. Additional mitigation plans may be required for other pollutant/event types as described in the Exceptional Events Rule, for example high ozone in El Paso due to wildfires.

- (2) The TCEQ will submit the following required documentation:
 - a. Draft of initial mitigation plan posted for public comment
 - b. Public comments received
 - c. Response to comments document
 - d. Mitigation plan transmitted to the EPA
 - e. Correspondence between the EPA and the TCEQ
 - f. Subsequent reviews of the mitigation plan and associated documentation

Appendix A

Protocol for Notification of an Exceptional Event

- Request that the following entities subscribe to the daily AQI forecast issued by TCEQ:
 - EPA Region 6
 - Texas Department of State Health Services
 - Texas Department of Transportation
 - Local air agencies
 - Relevant (to El Paso or Harris Counties) media outlets (via Agency Communications)
 - Relevant (to El Paso or Harris Counties) advisory groups (<https://www.tceq.texas.gov/agency/advise>)
- When forecasted levels of PM are expected to exceed the applicable short-term NAAQS, the TCEQ will take the following actions:
 - Information will be included in the daily forecast directing the public to applicable TCEQ webpages describing how to lower exposure to PM_{2.5} and mitigating measures the public can implement.
 - If necessary, coordinate and disseminate appropriate public health advice, warnings, and necessary follow-up advice or actions with the following:
 - EPA Region 6
 - Texas Department of State Health Services
 - Local air agencies
 - Texas Division of Emergency Management via TCEQ Emergency Management
 - Public websites and social media accounts will be updated with information from the daily Forecast.
 - Determine if additional actions should be taken by the TCEQ, including additional mitigation steps. If any actions are identified, they will be included in the daily forecast if time allows, or in a follow-up alert (i.e. email, social media post, etc.) sent to the email list identified above.

Appendix B

Protocol for Regular Communication and Outreach

These activities may include collaboration between potentially affected local, state, tribal and federal air quality managers, and/or emergency response personnel.

Public Health Organizations

- The TCEQ will coordinate with the Texas Department of State Health Services (DSHS) regarding specific public health-related advice that should be disseminated by one or both agencies.
- The TCEQ will ensure that relevant information from that agency is listed on the TCEQ website and that the DSHS is provided with information for its website as well.
- At the same time, TCEQ will ensure that the DSHS is provided with updated information relevant to Exceptional Events as that information becomes available and follow up with additional public health notifications as necessary.

EPA

- The TCEQ meets monthly via teleconference with Region 6 staff. These phone calls will be used to provide regular communication with EPA regarding Exceptional Events.
- Additional discussion with EPA staff will occur as needed when Exceptional Events occur or are being prepared for demonstration submittal.

Local air quality managers

- The TCEQ meets with local air quality managers regularly via organizations such as Council of Governments and the Texas Clean Air Working Group. The TCEQ will share Exceptional Event-related information during the regular meetings of such organizations, as necessary.

Emergency Response

- The TCEQ regularly communicates with emergency management organizations through groups such as the Texas Division of Emergency Management. The TCEQ will share Exceptional Event-related information during the regular meetings of such organizations, as necessary.

Appendix C

Documentation of Opportunity for Public Comment

The Texas Commission on Environmental Quality (TCEQ) conducted a public comment period for the draft Exceptional Events Mitigation Plans for El Paso and Harris Counties from September 19, 2018 through October 19, 2018.

The draft Mitigation Plans were posted at the following location on the TCEQ's website:

- [Draft Exceptional Events Mitigation Plans for El Paso and Harris Counties](#)

The following email was distributed by the TCEQ via the govdelivery system:

The public is invited to comment on proposed Exceptional Events Mitigation Plans for El Paso and Harris Counties.

In accordance with [81 FR 191](#), *Treatment of Data Influenced by Exceptional Events*, the document describes the TCEQ's exceptional event mitigation plan as required for PM_{2.5} due to African dust in Harris County and PM_{2.5} due to high winds in El Paso County.

The TCEQ is accepting comments on the draft mitigation plans until **5:00 p.m. on October 19, 2018**. Comments should be submitted by e-mail to amda@tceq.texas.gov with "Mitigation Plan" as the subject. Comments received and responses from the TCEQ will be submitted to the EPA along with the proposed Exceptional Events Mitigation Plans. The EPA will review this document along with any comments received and decide whether the required elements have been included.

[Draft Exceptional Events Mitigation Plans for El Paso and Harris Counties](#)

During the comment period, written comments were received from four organizations submitted jointly in a single letter. This letter is attached as Appendix D

Appendix D

Public Comments Received



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Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753
Via email to amda@tceq.texas.gov.

October 19, 2018

Re: Draft Mitigation Plans for Exceptional Events in Texas

Public Citizen, Texas Health and Environmental Alliance, Air Alliance Houston, and Coalition of Community Organizations appreciate the opportunity to provide these comments. We would welcome the opportunity to discuss our recommendations further. Please contact Adrian Shelley at ashelley@citizen.org, 512-477-1155.

TCEQ should improve its communication with the public about exceptional events.

The Code of Federal Regulations directs TCEQ to produce, "Methods to minimize public exposure to high concentrations of identified pollutants."¹ TCEQ states that the best method to minimize public exposure is to notify the public about an event and, to its credit, cites the daily air quality forecast as a means it uses to communicate with the public. TCEQ also points to some helpful educational resources online.

I am among that rarified group of Texans who receives and reads the daily air quality forecast email, but I doubt there are many of us. TCEQ should use more methods to communicate with the public about an approaching exceptional event. The following methods should be considered:

- Social media posts.
- Outreach to meteorologists.
- Communication to reporters (historically there has been significant coverage about impending or ongoing exceptional events).
- Use of Texas Department of Transportation's dynamic message signs (DMS).

The last suggestion, TxDOT DMS boards, is already used to notify the public about ozone action days. We recommend DMS boards also be used to notify the public about exceptional events.

TCEQ should develop mitigation measures now, not wait for exceptional events to occur.

The Code of Federal Regulations directs TCEQ to develop a plan to mitigate air pollution during exceptional events. The plan must include measures that address each of the following:²

- (A) Measures to abate or minimize contributing controllable sources of identified pollutants.
- (B) Methods to minimize public exposure to high concentrations of identified pollutants.

¹ 40 CFR §51.930(b)(2)(ii)(B) (2016).

² 40 CFR §51.930(b)(2)(ii) (2016).



(C) Processes to collect and maintain data pertinent to the event.

(D) Mechanisms to consult with other air quality managers in the affected area regarding the appropriate responses to abate and minimize impacts.

The TCEQ's draft plan addresses section (A) above as follows:³

When the TCEQ becomes aware that an Exceptional Event is likely to occur (e.g. approaching wildfire or dust storm), and the daily forecast indicates air quality conditions will be of sufficient severity (e.g. AQI of purple, indicating conditions are Very Unhealthy), additional measures to abate or minimize contributing controllable sources of identified pollutants that are within the jurisdiction of the agency will be considered on a case-by-case basis. Otherwise, the agency will rely on existing and future agency rules, SIP requirements, and permitting measures for reasonable controls and existing mechanisms for public outreach. For example, the daily forecast will notify the public when levels of PM or ozone are expected to exceed the applicable short term NAAQS (AQI of orange).

The TCEQ addresses contributing controllable sources of pollutants through permitting of local sources and expects that existing controls will help minimize concentrations of identified pollutants.

The TCEQ should develop this portion of the plan more completely. The draft plan claims that "permitting of local sources and existing controls" will be adequate. This is untrue. In fact, the Houston-The Woodlands-Sugarland CBSA does not meet the 2012 24-hour standard for PM_{2.5} of 12.0 µg/m³ unless certain exceptional events are removed from the data.⁴ When the area was designated, commenters pointed out that attainment was artificially achieved by removing these exceptional events.⁵ Although TCEQ is within its legal right to remove those events, it is false to say that existing controls will minimize concentrations. The data shows that existing controls are not adequate to bring the area into attainment, and TCEQ has only achieved that goal by removing exceptional events from the data.

For this reason, TCEQ should develop a plan now to reduce PM emissions when an exceptional event occurs. TCEQ has proposed to wait until an exceptional event is imminent, at which point it will consider mitigation measures "on a case-by-case basis." We recommend a more proactive approach. The exceptional events that require planning are Saharan dust events in Harris County and agricultural fires in El Paso County. For these events, we recommend the following approach:

1. Identify all stationary and area sources of PM in the affected counties.
2. Submit an information request to all stationary and area source owners asking what temporary measures they could implement to reduce PM pollution. Potential voluntary, temporary measures for stationary sources might include: reducing or ceasing operations; postponing turnarounds; wet

³ Draft Plan at p. 3.

⁴ See, e.g.,

https://www.tceq.texas.gov/assets/public/implementation/air/sip/pm25/2012naaqs/PMDesignationsInfoMeeting_Houston.pdf at p. 9.

⁵ See <https://www3.epa.gov/pmdesignations/2012standards/final/20141217rtc.pdf>.



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dust suppression on stock piles, haul roads, or other fugitive sources; limiting emissions of sulfur compounds and ammonia, which combine in the atmosphere to form particulate ammonium sulfide; limiting use of stationary engines; limiting use of combustion engine vehicles. Measures for area sources might include: reducing or ceasing operations and wet dust suppression.⁶

3. Develop a voluntary action plan for sources that can reduce PM upon request by implementing predetermined measures.
4. Execute voluntary action plans when a PM event is imminent.

The TCEQ should develop plans now to mitigate PM pollution. Measures identified in a plan now will be ready when the next exceptional event is imminent.

At present, we are not aware of any such planned PM contingency measures. We seriously doubt that TCEQ could develop such measures in a few days' time before an exceptional event. Given that the types of exceptional events and the areas they affect are already known to the agency, it should develop its contingency measures now, in this draft mitigation plan.

TCEQ should elaborate on the “mandatory or voluntary measures” alluded to in the draft plan.

In the draft plan, the TCEQ states that, “Other actions may include mandatory or voluntary measures, consideration of full-time or contingent controls on event-related as well as non-event related sources. These types of measures have been described in previous Exceptional Events demonstrations for Harris and El Paso Counties, as well as SIPs for those areas and are available through the TCEQ website...”⁷

The draft plan then provides a laundry list of documents, many of which do not include emissions control measures. Unfortunately, reference to these documents does not make clear what mandatory or voluntary measures TCEQ is considering. Again, it will not do to identify measures on a case-by-case basis when an exceptional event is approaching. This draft plan is the place to identify mandatory or voluntary measures.

Importantly, if TCEQ believes that it has the authority to implement mandatory measures on a case-by-case basis, the commission should clearly articulate what that authority is, what sources it applies to, and what mandatory measures will be taken. We can imagine a scenario in which an attempt to impose a mandatory measure on a source of emissions was met with a legal challenge, kicking off a regulatory process that would easily extend beyond the duration of a single exceptional event. In order to avoid this situation, TCEQ should articulate its authority now and develop a plan with mandatory or voluntary measures and their targets identified now.

TCEQ recommends actions for members of the public to take but none for members of industry.

⁶ The draft plan states that “. . .mitigating measures such as wetting streets are not likely to reduce PM significantly under these circumstances.” Draft Plan at 4. The draft does not explain why TCEQ believes wetting streets will not be effective and does not offer alternative strategies, except for strategies that demand action from community members.

⁷ Draft Plan at 3.



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The draft plan includes a list of voluntary actions that citizens can take to reduce particle pollution.⁸ There is no similar list of actions—voluntary or otherwise—that members of industry can take. This may send the wrong message about where responsibility for PM pollution, and PM pollution reductions, lies.

In 2016, the TCEQ's Point Source Emissions Inventory reported 32,049.28 tons of PM_{2.5} pollution from stationary sources.⁹ We are not aware of the amount of PM_{2.5} emissions directly attributable to members of the public. It may very well be that individual activities—driving foremost among them—do indeed contribute significantly to a region's PM pollution. And that there are real opportunities for PM reduction through actions by members of the public. But without a better understanding of the public contribution to PM pollution and the opportunities for PM reductions, this draft plan sends the wrong message: if the public is concerned about PM pollution, the public should do something about it. We disagree.

Conclusion

Air pollution kills people. It doesn't matter if the pollution is part of an exceptional event, a permitted release, or the ambient air. Air pollution sickens and kills, and the more pollution present in Texas' air, the more Texans will get sick and die.

Texas and the TCEQ are fond of regulatory wrangling to artificially bring an area into compliance with public health and environmental laws. These moves may be legal, but they cost lives. We encourage TCEQ to end these practices and to proactively develop strategies to reduce air pollution and keep Texans healthy. The costs of doing so will be recovered many times over in the value of healthy, thriving Texans.

Again, we appreciate the opportunity to provide these comments. If you wish to discuss these issue further, we can be reached by email at ashelley@citizen.org and phone at 512-477-1155.

Respectfully,

Adrian Shelley
Director, Public Citizen's Texas Office

Jackie Young
Executive Director, Texas Health and Environment Alliance, Inc.

Bakeyah Nelson, Ph.D.
Executive Director, Air Alliance Houston

Rev. James Caldwell
Coalition of Community Organizations

⁸ Draft Plan at 4. Note that some of these measures, such as refueling a vehicle late in the day or using low VOC products, are incorrectly identified as PM reduction strategies.

⁹ See <https://www.tceq.texas.gov/assets/public/implementation/air/ie/pseisums/2016statecum.xlsx> (pdf download).

Appendix E

Response to comments

RESPONSE TO COMMENTS RECEIVED REGARDING THE EXCEPTIONAL EVENTS MITIGATION PLANS FOR EL PASO AND HARRIS COUNTIES

The Texas Commission on Environmental Quality (TCEQ) conducted a public comment period for the draft Exceptional Events Mitigation Plans for El Paso and Harris Counties from September 19, 2018 through October 19, 2018. During the comment period, written comments were received from four organizations submitted jointly in a single letter.

COMMENTS AND RESPONSES

2. The commenters suggested use of methods other than daily forecast email (e.g. social media, outreach to meteorologists, press outreach, TxDOT dynamic message signs) to distribute information to the public concerning Exceptional Events when they occur.
 - o The TCEQ distributes the daily air quality forecasts through multiple avenues. In addition to being available through email for interested parties, they are posted on the agency [website](#) and [Twitter feed](#). The text has been updated to make this clear.
 - o The TCEQ has used these methods of communication in the case of other events such as floods and wildfires to distribute information to the public, and these methods would be available in the event of an expected Exceptional Event should additional outreach be deemed necessary.
 - o Area news organizations also distribute information from the TCEQ, including ozone action days through their websites ([Houston area news example](#)) and social media accounts ([Houston area twitter example](#)).
 - o The draft Mitigation Plan stated the intent to work with other agencies, including TxDOT regarding outreach when Exceptional Events occur. The TCEQ appreciates the suggestion and will explore the possibility of coordinating outreach via dynamic messaging signs with TxDOT.
3. The commenters suggested additional detail in the Mitigation Plan addressing measures to abate or minimize contributing controllable sources of identified pollutants.
 - o The EPA indicated in the Exceptional Events rule that states could rely on existing plans to satisfy the mitigation requirements so long as the identified elements are included and addressed. The TCEQ has elected to rely on existing mitigation measures, as allowed, and has documented how each element in the Mitigation Plan is fulfilled by existing measures.
4. The commenters remarked on attainment designations of the 2012 PM NAAQS for specific areas.
 - o These comments are outside the scope of the Mitigation Plan as it addresses attainment designations for a particular area.
5. The commenters stated that the exceptional events that require planning are Saharan dust events in Harris County and agricultural fires in El Paso County.
 - o The TCEQ is required to submit Exceptional Event Mitigation Plans for PM_{2.5} due to African Dust in Harris County and PM_{2.5} due to high winds in El Paso County. A Mitigation Plan for elevated PM_{2.5} or ozone due to agricultural fires is not required for El Paso County at this time.
6. The commenters preferred approach to the Mitigation Plans would include potential voluntary, temporary measures for stationary sources and gave a number of examples.
 - o The TCEQ appreciates the suggestions provided and has worked with areas covered by the Mitigation Plan to implement many of the measures suggested by the commenters. These measures have been detailed in the SIPs that cover Harris and El Paso Counties as well as past Exceptional Events demonstrations. These measures have included:
 - Voluntary reduction efforts in the Houston Clinton vicinity that have greatly reduced local source impacts on PM_{2.5} at the Houston Clinton site including:
 - improving traffic flow through traffic barriers on the shoulder of Clinton Drive and traffic lights, adding vegetation along Clinton Drive,

reducing locomotive emissions at the nearby port, replacing calcium sulfate from port roadways and work yards with fresh compacted soil topped by emulsified asphalt, paving of some parking areas, and implementing dust control measures at a nearby fluorspar unloading and storage facility.

- A Memorandum of Agreement (MOA) between the TCEQ and the City of El Paso to reflect updates to the PM control measures. The regulations included in these SIP revisions are summarized below:
 - 30 TAC §111.111(c) prohibits the use of solid fuel heating devices during periods of atmospheric stagnation in the City of El Paso, including the Fort Bliss Military Reservation.
 - 30 TAC §111.141 establishes that §111.143 (relating to Materials Handling), §111.145 (relating to Construction and Demolition), §111.147 (relating to Roads, Streets, and Alleys), and §111.149 (relating to Parking Lots), and associated dates of compliance, shall apply to the City of El Paso and portions of the Fort Bliss Military Reservation.
 - 30 TAC §111.145 establishes measures to control dust emissions related to land clearing and construction, repair, alteration and demolition of structures, roads, streets, alleys, or parking areas of any size.
 - 30 TAC §111.147 establishes measures to control dust emissions on public, industrial, commercial, or private roads, streets, or alleys including application of asphalt, water, or suitable oil or chemicals and mechanical street sweeping. Specific requirements are established for alleys and levee roads within the City of El Paso, including paving new alleys and disallowing use of unpaved existing alleys for residential garbage and recycling collection.
- 30 TAC §111.143 establishes measures to control dust emissions related to the handling, transport, or storage of materials which can create airborne particulate matter including the application of water, chemicals, or coverings on materials stockpiles; use of hoods, fans, and filters to enclose, collect, and clean the emissions of dusty materials; and the covering of all open-bodied trucks, trailers, and railroad cars transporting materials in the City of El Paso.
- 30 TAC §111.149 establishes measures to control dust emissions, including appropriate application of asphalt, water, or suitable oil or chemicals for temporary parking lots, parking lots having more than five spaces, and paved parking lots having more than one hundred spaces.
- City of El Paso Municipal Code Chapter 9.38, concerning wood burning, prohibits the operation of a solid fuel heating device within the city of El Paso during a no-burn period, unless an exemption has been obtained.
- City of El Paso Municipal Code Chapter 19.15.020, concerning subdivider responsibility, establishes standards for proposed roads serving new developments, including alleys.
- City of El Paso Municipal Code Chapter 19.15.160 establishes standards for the construction and improvement of alleys.
- City of El Paso Municipal Code Chapter 20.14 establishes standards for the provision of off-street parking, loading and storage, including standards for dust-free surfacing.

7. The commenters state that the TCEQ did not adequately support the efficacy of wetting streets in the event of a dust storm and did not offer alternative strategies, except for strategies for the public.
 - The TCEQ agrees that this text obscures the larger point that the most effective way to reduce public exposure to PM in the event of an Exceptional Event such as a dust storm is to adequately inform the public of the occurrence of the event. This text has been removed.
8. The commenters state that they are not aware of planned PM contingency measures and that the draft Mitigation Plan is unclear as to what mandatory or voluntary measures TCEQ is considering.
 - Please see response five above detailing measures applicable to Harris and El Paso Counties as well as the applicable citations in the draft Mitigation Plan.
9. The commenters state that if the TCEQ believes that it has the authority to implement mandatory measures on a case-by-case basis, the commission should clearly articulate what that authority is, what sources it applies to, and what mandatory measures will be taken.
 - The Texas Clean Air Act (TCAA) provides the TCEQ with broad legal authority. It may adopt emission standards and compliance schedules applicable to regulated entities; emission standards and limitations and any other measures necessary for attainment and maintenance of national standards; and, enforce applicable laws, regulations, standards and compliance schedules, and seek injunctive relief.
10. The draft plan includes a list of voluntary actions that citizens can take to reduce particle pollution. There is no similar list of actions—voluntary or otherwise—that members of industry can take.
 - The Exceptional Events Rule requires that Mitigation Plans provide for public education concerning actions that individuals may take to reduce exposures to unhealthy levels of air quality during and following an exceptional event. The referenced actions are provided in that context.
 - However, the TCEQ agrees that it would also be appropriate to provide a similar list of actions that businesses can take when Exceptional Events occur. Therefore, additional text has been added to section B (§51.930(b)(2)(ii): Steps to identify, study and implement mitigating measures):
 - Shift work schedules to allow employees to avoid morning rush-hour traffic.
 - Allow employees to work at home (telecommuting).
 - Offer bus passes.
 - For employees who rideshare or use public transportation, provide a guaranteed emergency ride home.
 - Carpool to lunch and meetings.
 - Schedule meetings that don't require driving (meet on site or make conference calls).
 - Offer free drinks at your cafeteria to encourage employees to eat at work.
 - Postpone fueling fleet vehicles until after 6 p.m.
 - Postpone working with mowers, bulldozers, backhoes, tractors, and other two-cycle engine activities.
 - Delay painting, degreasing, tank cleaning, ground maintenance, and road repair.
 - Postpone routine flaring or venting of hydrocarbons.
 - Postpone the loading and hauling of volatile organic compound (VOC).
 - Postpone VOC-producing activities such as chemical treatment and catalyst preparation.
 - Switch loads to fired heaters or boilers with low nitrogen oxide burners.
 - A list of measures that apply to businesses in the areas covered by the Mitigation Plan can also be found in response six above.

11. The commenters assert that the draft Mitigation Plan implies responsibility for PM reductions lies with the public.
 - The section of draft Mitigation Plan referred to by this comment addresses the requirement to provide for public education concerning actions that individuals may take to reduce exposures to unhealthy levels of air quality during and following an exceptional event. The TCEQ disagrees with the assertion that responsibility for PM reduction during an Exceptional Event falls solely on the public. However, the public may also play an important role in achieving emissions reductions during such events through the actions listed as examples in the draft Mitigation Plan.
12. The commenters state that some of the measures, such as refueling a vehicle late in the day or using low VOC products, listed in the Mitigation Plan are incorrectly identified as PM reduction strategies.
 - Because Volatile Organic Compounds (VOCs) contribute to the formation of Particulate Matter through the formation of secondary organic aerosol (SOA)¹, reductions in VOCs may help reduce PM concentrations. Therefore, no change has been made in response to this comment.
13. The commenters provided additional discussion regarding the health and mortality impacts of air pollution as well as their position regarding the past inactivity of the State of Texas and the TCEQ regarding these issues.
 - These comments address topics that are outside the scope of the draft Mitigation Plan.

¹ Seinfeld, J. H.; Pandis, S. N. Atmospheric Chemistry and Physics: From Air Pollution to Climate Change; Wiley, 2006.