

February 12, 2013

VIA ELECTRONIC MAIL

Andra Juniel
Air Assessment Section
Arizona Department of Environmental Quality
1110 W. Washington Street, 3415-A
Phoenix, AZ 85007.

RE: Response to ADEQ January 2013 Request For Public Comments on Exceptional
Events In The Greater Phoenix Area

Dear Ms. Juniel:

We submit the following comments regarding the exceptional event demonstrations for September 11 & 12, 2011 and June 16; June 27; July 11; August 11; August 14; and September 6, 2012. With respect to these demonstrations, we incorporate by reference the general observations included in our letter of January 1, 2013 regarding the December 2012 demonstrations. We provide the following additional comments in light of ADEQ's responses to those earlier comments.

In our earlier comment letter, we expressed the opinion that the demonstrations should be tested by modeling. Specifically, we stated that the modeling should be used to support assumptions made by ADEQ and its consultants regarding the cause and impacts of the particular events. We indicated that we were in the process of modeling these exceptional event demonstrations and would be making the model results available online for public review. We are moving forward with that effort and anticipate having some of the initial results available as soon as next week. We will, of course, provide notice to ADEQ when the model results are available.

In response to our comment, Mr. Eric Massey wrote that because "the exceptional event demonstrations rely upon actual measured values, ...[t]he addition of model derived data into the analysis would not provide additional benefit in characterizing the events." Letter dated Jan. 28, 2013 to Joy E. Herr-Cardillo from Erik C. Massey, p. 3, Comment 2. We disagree. We realize that air quality analysis should rely upon actual measured data whenever possible; however, air monitoring data is geographically and temporally limited. That is where air quality modeling can fill the gaps. Air quality modeling is a method that has been supported by the Clean Air Act and its implementing Federal Regulations since their inception. The EPA Exception Events guidance recommends a number of analytical methods that can only be done by the use of models (i.e. source contribution analysis, comprehensive controls analysis, spatial and temporal

relationship between event, sources and transport of emissions, etc.) Modeling would not only fill in the gaps and test the assumptions, it would also provide important information about what, if any, additional controls could be implemented to prevent future events so as to better protect the public health.

Notably, in its concurrence letter of September 6, 2012 (regarding the demonstration for the July 3 – 8 events) ADEQ noted, “the information and analyses presented in ADEQ's submittal do not represent all possible evidence for exceptional event packages, and additional or alternate evidence may be necessary to make an exceptional event determination in other instances or for other types of events.” Letter dated September 6, 2012 To Erik Massey from Jared Blumenfeld. We believe that back trajectory analysis (using WRF as input) would provide the information necessary to answer the critical questions: 1) where was the storm? 2) did it lift dust? 3) did that dust reach the exceeding monitor? and 4) was the dust controllable?

In sum, we believe incorporating modeling into the analysis would not only improve the quality of the demonstration, but would also provide ADEQ with important information that would allow it to address the problem of high wind events, which appear to be occurring with increasing frequency to the detriment of the area's air quality

We are also concerned with the statement in the demonstrations that the events were caused by “winds transporting dust from desert areas of Pima and Pinal Counties” or “desert area outside of the Phoenix PM10 nonattainment area” without further addressing the source of that dust. The EPA Draft Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Ambient Air Quality Data Affected by High Winds under the Exceptional Events Rule (June 2012) states that “all upwind areas of disturbed soil to be considered potential contributing sources.” (6.3.2.3 Basic controls analysis). Further, “[a] basic controls analysis should identify all contributing emission sources in upwind areas and provide evidence that those sources were reasonably controlled, whether anthropogenic or natural.” (6.3.2.3 Basic controls analysis) and “inspection reports and/or notices of violations (NOVs) in upwind areas should be submitted, if available.” None of the demonstrations provide evidence that control measures outside of Maricopa County were even evaluated.

Under the Clean Air Act, the EPA generally considers a state (not including areas of Indian country) to be a single responsible actor. Accordingly, neither the EPA nor the Exceptional Events Rule provides special considerations for intrastate scenarios when an event in one county affects air quality in another county in the same state, assuming that the event occurs on land subject to state authority (versus tribal government authority). EPA response to 6.4. Reasonable controls for sources outside of state/local/tribal jurisdiction. Because ADEQ is the single responsible actor for air quality control in Arizona, it should address whether Agricultural Best Management Practice inspectors were sent to Pima and Pinal Counties during any of the five-day dust control forecast periods.

We appreciate the opportunity to comment on the demonstrations.

Sincerely,



Joy E. Herr-Cardillo