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*Sent via Email*

Allegheny County Health Department  
Air Quality Program  
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**Re: PennFuture's Comments on ACHD's Proposed Mon Valley Air Pollution Episode Regulations**

Dear Allegheny County Health Department Air Quality Program:

Citizens for Pennsylvania's Future ("PennFuture") submits the following comments on behalf of the organization and its members on the proposed revisions to Allegheny County Health Department (the "Department") Article XXI regulations regarding air pollution episodes in the Mon Valley.

PennFuture is a Pennsylvania-statewide environmental organization dedicated to leading the transition to a clean energy economy in Pennsylvania and beyond. PennFuture strives to protect our air, water, and land, and to empower citizens to build sustainable communities for future generations. A main focus of PennFuture's work is to improve and protect air quality across Pennsylvania, and in particular in Allegheny County, through public outreach and education, advocacy, and litigation.

The Department has requested public comment on the proposed revisions to Article XXI, and the corresponding sections of County Ordinance 16782, adding a new section, § 2106.06, "Mon Valley Air Pollution Episode" and a related portion of § 2105.50, "Open Burning." The proposed revisions to Article XXI would also be submitted as revisions to Allegheny County's portion of the Pennsylvania PM<sub>2.5</sub> State Implementation Plan. The Department's proposed changes are to combat exceedances of the 24-hour federal National Ambient Air Quality Standard ("NAAQS") for fine particulate matter ("PM<sub>2.5</sub>") at the Liberty monitor resulting from temperature inversions caused by certain weather conditions that trap emissions from industrial sources in the Mon Valley.

The Mon Valley area is home to some of the biggest contributors to air pollution in Allegheny County, including U.S. Steel's Mon Valley Works. These air inversion episodes prevent air pollution from dissipating and can last for days, exposing communities in the Mon Valley to harmful levels of air pollution for prolonged periods. PennFuture welcomes the

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Department's efforts to strengthen the county's episodic weather regulations. However, the proposed regulations fail to provide for concrete emissions reductions and other requirements needed to protect the public health of communities in the Mon Valley during these dangerous weather inversion events. PennFuture remains concerned about the continued levels of harmful emissions from industrial polluters in the Mon Valley and believes the Department should be doing more to reduce emissions, particularly during bad weather events.

**I. The Department should revise the definitions of Watch and Warning to prevent extended periods of exceedances before and after a Warning.**

The proposed regulations adopt a two-phased approach to addressing episodic weather events in the Mon Valley. First, the Department issues a "Mon Valley Air Pollution Watch" if the Department has determined from an air quality forecast that, "for at least the next 24-hour period atmospheric conditions will exist which indicate that the 24-hour average ambient concentration of PM2.5" in one or more of the listed municipalities is forecasted to exceed the Mon Valley PM2.5 threshold level. Article XXI Proposed Revision, § 2106.06(c)(1). The Department defines the Mon Valley PM2.5 threshold level as the value of the primary 24-hour PM2.5 NAAQS. *Id.* § 2106.06(c). In the second phase, the Department will then issue a "Mon Valley Air Pollution Warning" if "during a rolling 24-hour averaging period, the Mon Valley PM2.5 threshold level is exceeded at an official monitoring station" in the listed municipalities, and the Department has determined the atmospheric conditions of a Watch will continue. *Id.* § 2106.06(c)(2).

The industrial sources covered by the proposed rule must submit a Mitigation Plan to the Department for each phase. The Watch Mitigation Plan must "include procedures to ensure the source is operating in a manner consistent with good engineering practice and all air pollution control equipment is maintained in good working condition." *Id.* § 2106.06(e)(1). The Watch Mitigation Plan also requires procedures to ensure there is sufficient staff and resources to implement the Warning phase within 24 hours. *Id.* The Warning Mitigation Plan must include measures to reduce PM2.5 and PM10 emissions "to minimize the impact on public health, safety, and welfare," a timeframe for implementing the measures, and "an estimate of the PM2.5 and PM10 emissions reductions during a 24-hour period for each measure." *Id.* § 2106.06(e)(2). Accordingly, emissions reduction measures are not required until the Warning phase is triggered.

Under these provisions, a Warning is not triggered until the PM2.5 threshold level is exceeded during a rolling 24-hour averaging period. A rolling 24-hour average is calculated by averaging data from the current hour and the previous 23 hours. That means that the Mon Valley could experience high levels of PM2.5 at the beginning of a bad weather event for a number of hours before the rolling 24-hour average actually exceeds the threshold to trigger a Warning. The rolling 24-hour average requirement will leave the communities of the Mon Valley vulnerable to harmful levels of PM2.5 while allowing industry to continue to churn out more air pollution unabated. This is clearly not consistent with the Department's policy "to protect the air resources of the County by pollution prevent and pollution control to the degree necessary for the . . . [p]rotection of the health, safety and welfare of all its citizens." Article XX, § 2101.02(a)(1).

The Department must redraft the Warning trigger to avoid these inevitable prolonged periods of harmful exceedances.

Moreover, a Warning requires both that the rolling 24-hour average of PM<sub>2.5</sub> exceeds the relevant threshold, *and* that the atmospheric conditions will continue as described in a Watch. *Id.* § 2106.06(c)(2). A Watch requires that atmospheric conditions be forecasted to exist for at least the next 24-hour period. This appears to suggest that, even if the rolling 24-hour average finally exceeds the threshold after hours of exceedances, the Department would not issue a Warning if atmospheric conditions were forecasted to end 23 hours later. This has the potential to allow PM<sub>2.5</sub> exceedances for over a day without triggering a Warning from the Department requiring emission reductions from industry. Again, this is insufficient to protect the health, safety, and welfare of our communities and the Department must redraft the Warning trigger to avoid these inevitable prolonged periods of harmful exceedances.

This requirement also has implications for the termination of a Warning. Under the proposed rule, the Department will terminate a Watch or Warning when the conditions are no longer met. *Id.* § 2106.06(h)(1). Again, the conditions for a Warning would no longer be met if the atmospheric conditions were forecasted to end less than 24 hours later. This means that the Department could terminate a Warning, allowing facilities to ramp emissions back up to normal levels, even though conditions that allow for harmful exceedances of PM<sub>2.5</sub> are still present for the next 23 hours. The Department must revise the proposed Watch and Warning requirements to avoid these loopholes that allow for extended periods of exceedances without recourse.

## **II. The Department should require preventative measures to reduce emissions during the Watch phase when an inversion is forecasted.**

Under the proposed two-phased approach as discussed above, only the second Warning phase includes measures for facilities to reduce PM<sub>2.5</sub> and PM<sub>10</sub> emissions “to minimize the impact on public health, safety, or welfare.” Proposed Revision, Article XXI § 2106.06(e)(2). The initial Watch phase only includes procedures to ensure the source is operating properly and air pollution control equipment is maintained in good working condition, and that the facility records and reports their actions during this time to the Department. *Id.* § 2106.06(e)(1).

Accordingly, the proposed rule does *nothing* to reduce emissions in order to prevent exceedances from happening, even when a prolonged inversion event is forecasted. Instead, emission reduction is only called for during the Warning phase when communities in the Mon Valley have likely already been exposed to harmful levels of PM<sub>2.5</sub>. As discussed above, an inversion event could occur leading to harmful levels of air pollution without triggering a Warning under the proposed rule if atmospheric conditions are forecasted to end in less than 24 hours, putting at risk the health, safety, and welfare of the communities during that period. These inversions are common weather events in the Mon Valley that are known to lead to dangerous levels of air pollution. Under the proposed rule, the implementation of emissions reduction measures comes far too late in the course of a harmful weather event to be protective of public health. This is inconsistent with the Department’s policy recognizing pollution prevention as the preferred strategy for reducing risk to air resources. *See* Article XXI, §

2101.02(b). The initial Watch phase must also include some measures to reduce emissions to in an effort to avoid harmful exceedances during a forecasted inversion, rather than waiting to reduce emissions once exceedances have already reached levels sufficient to trigger a Warning. The two-phased approach as proposed by the Department leaves communities in the Mon Valley vulnerable to harmful pollution levels and does not do enough to combat the dangerous effects of forecasted inversion events. Instead of solely reducing emissions reactively after the harm has begun, the Department must work to prevent the harmful impacts of a weather inversion when one is forecasted.

### **III. The Department should provide for concrete target levels of emissions reduction during a Warning and clarify language requiring sources to implement emissions reduction measures.**

The proposed rule requires that sources develop a Mon Valley Air Pollution Mitigation Plan for each phase. Proposed Revision, Article XXI § 2106.06(e). As discussed above, only the Warning Mitigation Plan requires an industrial polluter to actually take measures to reduce PM2.5 and PM10 emissions. *Id.* The Warning Mitigation Plan also requires that sources provide an estimate of the PM2.5 and PM10 emissions reductions during a 24-hour period for each proposed measure. *Id.* § 2106.06(e)(2). In determining whether a Mitigation Plan is acceptable, the Department may consider the following factors: the feasibility of implementing the Warning phase within 24 hours; whether the measures to decrease emissions “can reasonably improve public health, safety, or welfare;” and whether the estimated reduction in particulate matter emissions “is proportionate to the source’s contribution to emissions” in any of the listed municipalities. *Id.* § 2106.06(g)(3).

Concerningly, the proposed rule fails to require sources to meet any specific targets for emissions reductions in their Warning Mitigation Plans. It also does not designate any overall target levels for reductions designed to reasonably improve public health, safety, or welfare during an inversion event. As a result, the proposed rule gives industrial sources and the Department wide discretion in proposing and accepting emissions reductions measures. Without target emission reduction levels, it is unclear if and to what extent the proposed reduction measures of all applicable sources will effectively combat the harmful exceedances communities in the Mon Valley experience during a prolonged inversion event. Under the proposed rule, the Department could approve Mitigation Plans that do not effectively reduce the exceedances of PM2.5 that impact our communities during inversion events. The Department must set concrete emissions reduction targets for industrial sources that are designed to protect public health during these bad weather events.

Additionally, the Department should clarify the language in the proposed rule that requires sources to immediately implement the procedures and measures of the Mitigation Plans during a Watch or Warning. The proposed rule states that when a Watch or Warning is issued, “[t]he Department shall notify all sources subject to this Section to implement the procedures and measures identified in either the Mon Valley Pollution Watch or Warning Phase.” Proposed Revision, Article XXI § 2106.06(h)(1). The Department should clarify and strengthen language in the proposed rule to make it clear that sources are required to immediately implement the

procedures and emissions reduction measures included in their respective Mitigation Plans at the start of a Warning or Watch. There should also be clear requirements for the Department to immediately notify sources whenever the triggering events occur, as explained below. The Department and the public must be able to effectively hold sources accountable for their obligation to implement the Mitigation Plan measures to reduce their PM2.5 emissions during an inversion event.

#### **IV. The Department should allow for public input on the Mitigation Plans.**

The geographical area covered by the proposed Mon Valley Air Pollution Episode rule includes 32 listed municipalities along the Mon Valley within Allegheny County. Proposed Revision, Article XXI § 2106.06(d). This area includes numerous municipalities designated as environmental justice areas. *See* Technical Support Document at 9, Figures 6 and 7. These are areas with low-income or minority populations which have historically experienced disproportionate environmental harms. The Mon Valley is home to many industrial sources that contribute to the harmful air quality experienced by these communities. The Department lists 18 facilities in the area subject to this proposed regulation, which means there are 18 facilities with emissions limits of at least 6.5 tons per year of PM2.5 and/or 10 tons per year of PM10. Under the proposed rule, Mon Valley Air Pollution Mitigation Plans for these facilities are reviewed and accepted by the Department without opportunity for public review or comment. The absence of public input opportunity is generally concerning, but with increased attention and outreach being promoted for environmental justice communities, the Department must do more to include these communities in the process and to ensure that additional burdens are not placed upon environmental justice communities. *See, e.g.*, PADEP, Environmental Justice Public Participation Policy. The impacted communities throughout the Mon Valley deserve an opportunity to weigh in on the plans for reducing emissions during inversion events.<sup>1</sup>

#### **V. More information is needed on the proposed forecasting of inversion events and on the mechanism for notification.**

The Department has not provided information on the proposed forecasting of inversions events sufficient for the public to meaningfully comment on this critical aspect of the proposed rule. In the proposed rule, the Department provides that it will rely on the air quality forecast provided by the Pennsylvania Department of Environmental Protection for determining Mon Valley Air Pollution Episodes. Proposed Revision, Article XXI § 2106.06(b). However, the Director of the Department “may approve a change in the air quality forecast provider or methodology.” *Id.* The Department notes that it “plans to build an infrastructure to model and forecast inversion events as a necessary component for effective regulation implementation.” Technical Support Document at 1. “The enhanced meteorological forecasting is expected to be accompanied by additional public notifications.” *Id.* The forecast of an inversion event is a vital

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<sup>1</sup> The area affected by this proposed rule extends to the edge of Allegheny County. Communities over the county line, including environmental justice areas, may still be impacted by emissions from Mon Valley facilities and by inversion events. The Department should make every effort to also allow for input from those communities and to similarly notify them of inversion events.

component of the process required to trigger a Watch and a Warning. *See* Proposed Revision, Article XXI § 2106.06(c). Without more information on the proposed new forecasting model, the public is not able to provide informed comment on the air pollution episode rule that is dependent on meteorological forecasting.

The Department similarly does not provide sufficient information on the planned mechanism for issuance of a Watch or Warning and notification under the proposed rule. The Watch and Warning phases are both triggered by the Department issuing each phase. *Id.* at § 2106.06(c). The implementation of the Mitigation Plans is triggered by the Department notifying all sources of a Watch or Warning. *Id.* § 2106.06(h)(1). As discussed above, the issuance of a Watch or Warning are very time sensitive. However, the Department does not provide specific information on how it determines that there is a forecasted inversion event and issues a Watch or Warning, or how it plans to notify sources. These mechanisms are important components of how the proposed rule will be implemented, and they should be sufficiently explained to allow for informed public comment.

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We appreciate the opportunity to submit these comments on the Department's proposed Mon Valley Air Pollution Episode regulations. Please contact the undersigned if you have any questions or wish to discuss these comments.

Sincerely,



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