ACHD Guidance on Article XXI §2106.06 (Mon Valley Air Pollution Episode)

The following ACHD Air Quality Program guidance document for the Mon Valley Air Pollution Episode (§2106.06) regulation is designed to assist regulated facilities develop their required air pollution mitigation plans. First, please read the attached regulation to understand its purpose and requirements. As detailed in the regulation, there are two separate phases for the air pollution mitigation plan: a watch phase and a warning phase. This guidance document is neither intended to supplement nor in any way change the regulation. Below are some suggestions and examples to include in your air pollution mitigation plan for both the watch phase and the warning phase. This is not a complete list – so please develop your plans to best fit your industry/facilities. This is a new regulation and as such we anticipate that the guidance document will undergo modifications with time. In the spirit of collaboration and cooperation, we welcome feedback.

Procedure for Companies to Develop a Plan for a <u>Watch Phase</u>

- List all processes or equipment that emit PM_{10} and/or $PM_{2.5}$
- For each source, briefly explain how it will be evaluated for proper operation and maintenance during the watch phase.

Procedure for Companies to Develop Mitigation Plan for a <u>Warning Phase</u>

- List all processes or equipment that emit PM_{10} and/or $PM_{2.5}$
- For each process, list all available methods to reduce PM_{10}/$PM_{2.5}$ emissions.
    - Describe each method and explain which ones are and which ones are not feasible.
    - For those that are not feasible, include a justification for why it is not feasible.
    - The reduction needs to last the length of the episode, which historically has been up to four days.
- Some possible methods are described below. Develop the Mitigation Plan based on feasible methods.
    - Evaluate and include the potential reduction of PM_{10}/$PM_{2.5}$ for all methods found to be feasible.
    - Estimate a percentage decrease based on maximum expected daily reduction and the average actual daily emissions from 2017 - 2020.

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  - Include the calculations in the submittal.
- Provide an estimate of how long it will take to fully implement each action and any data to support that estimate.
- Estimate the $PM_{2.5}$ or PM_{10} emissions reductions based on relevant time periods and not maximum or potential rates.

Suggested elements of the <u>Watch Phase</u>:

- Staff related:
  - Review procedures with employees to ensure all equipment is properly operating in a way to minimize air emissions.
  - Schedule additional or on-call employees for upcoming shifts to ensure source is fully staffed for a warning phase.
  - Conduct a shift meeting(s) to remind employees to prioritize the environmental impact of their operations to reduce emissions.
  - Share any other procedures which would help ensure sufficient staff levels and available resources to implement a warning phase.
- Equipment related:
  - Inspect any equipment or processes which may have a potential to increase emissions to ensure proper operation and maintenance.
  - Implement improved operation and maintenance practices beyond standard operating procedures.
  - Ensure the source is following the idling requirements under Act 124 of the PA Department of Environmental Protection regulations.
  - Conduct maintenance on all pollution control equipment.
  - Share any other procedures which help ensure the source is operating in a manner consistent with good engineering practices.
  - Share any other procedures which help ensure the air pollution control equipment is maintained in good working condition.

Suggested potential elements of the <u>Warning Phase</u>:

- Reduce production by a certain percentage or rate from normal operating conditions. A reduction from a potential maximum production rate will not be accepted if it is too high compared to normal operating rates for the relevant time period, thereby not resulting in an actual reduction in pollution.
- Reduce usage of diesel fuel or other $PM_{2.5}$ or PM_{10} creating fuel types or switch fuel types to lower $PM_{2.5}$ or PM_{10} as allowed by the relevant permits.
- Bring in additional employees to allow the source to operate in the best environmentally responsible manner.
- Delay production to a future day when a mitigation plan is not needed.
- Delay any non-essential activities to a future day when a mitigation plan is not needed.
- Fully or partially enclose material movement and other work activities which produce dust and other particulate matter ($PM_{2.5}$ or PM_{10} emissions).
- Modify work practices to decrease $PM_{2.5}$ or PM_{10} emissions such as:
    - slowing material handling
    - Fully or partially enclose material movement and other work activities which produce dust and other particulate matter ($PM_{2.5}$ or PM_{10} emissions).
- Stop or decrease unnecessary transportation activities and reduce travel speed on necessary transportation.
- Employ additional roadway wetting or other activities to minimize road dust creation.
- Add any other measures which reduce $PM_{2.5}$ or PM_{10} emissions.

Procedure for ACHD to Review Episode Plans

- ACHD will review the plan against the permit(s) to ensure that all sources of $PM_{10}/PM_{2.5}$ are accounted.
- ACHD will review the feasibility of the proposed methods of reduction:
    - Review will be based on total proposed decreases in emissions and the total permitted $PM_{10}/PM_{2.5}$ limits for the facility;
    - Review the justifications for rejected options;
    - ACHD will conditionally accept the plan if all methods of decrease have been addressed and adequate reasoning provided for methods not proposed; or
    - If the plan is rejected, ACHD will provide a written explanation and ask for revisions.

- After ACHD conditionally approves the mitigation plans, the staff will perform modeling analyses to assess the impact of the plans on PM2.5 for the region. To properly conduct the modeling, ACHD personnel may contact regulated facilities to provide additional information during this process. Based on the results of the modeling ACHD may notify the source that modifications to their plan are needed.

Thank you for working with the ACHD to ensure citizens in the Monongahela Valley have improved air quality during times of less than desirable atmospheric conditions.

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