

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

Air Quality Program

301 39th Street, Clack Health Center Building 7, Pittsburgh, PA 15201-1811
ph: 412.578.8103 • 24-hr: 412.687.ACHD (2243) • www.alleghenycounty.us/healthdepartment

SUBMISSION FORM – AIR POLLUTION MITIGATION PLAN

APPLICANT INFORMATION

The Air Pollution Mitigation Plan is submitted by affected facilities to meet the requirements of Allegheny County regulations found in §2106.06 (Mon Valley Air Pollution Episode) of Article XXI.

01 Facility Information

Name of Facility	TMS International, LLC at West Mifflin Plant		
Address	516 Delwar Road		
City State Zip+4	West Mifflin, PA 15236		
Permit #	0359	Phone	(412) 675-7105

02 Environmental Contact Information (Person to contact regarding technical details of this mitigation plan)

Name/Title	Frank Dello Buono / Environmental Engineer		
Address	1155 Business Center Drive, Suite 200		
City State Zip+4	Horsham, PA 19044-3454		
Email	fdellobuono@tmsinternational.com	Phone	(215) 360-9723

03 Responsible Official Information

Name/Title	Jerimi Yost / Global Director HSE		
Address	1155 Business Center Drive, Suite 200		
City State Zip+4	Horsham, PA 19044-3454		
Email	jyost@tmsinternational.com	Phone	(215) 956-5444



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04

AFFIDAVIT

I certify that, subject to the penalties of Title 18Pa. C.S.A. Section 4904 and 35 P.S. Section 4009(b)(2), I am the responsible official having primary responsibility for the operation of the facilities to which this air pollution mitigation plan applies and that the information provided in this mitigation plan is true, accurate and complete to the best of my knowledge, information and belief formed after reasonable inquiry.

Signature: 

Date 3/1/2022

Typed/Printed Name: **Jerimi Yost**





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05 List all equipment or processes at your facility that emit PM₁₀ and/or PM_{2.5}

Shredding Operation, Shearing Operation, Torch Cutting Operation, Prepared Material Handling, Power Screen Engine, Paved Roads & Vehicular Traffic, Comfort Heaters, NonFerrous Processing Plant

WATCH PHASE OF MITIGATION PLAN

06 How will your facility ensure that equipment which produces particulate emissions is operating in a manner consistent with optimal engineering practices?

The facility's equipment will operate at a capacity less than the permitted maximum capacity and apply control devices as needed. Operators are trained to implement best engineering practices if particulate emissions become excessive.

07 How will your facility ensure that air pollution control equipment is maintained in optimal working condition?

Records of operations will be maintained to demonstrate compliance with maximum capacity limitations and material types in optimal working conditions to minimize particulate emissions.

08 How will your facility ensure that actions taken in blocks 05 and 06 are properly monitored, recorded, and reported to the Health Department?

Certifications of compliance are submitted semiannually and annually. Emissions inventory statements are submitted annually.

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WARNING PHASE OF MITIGATION PLAN

09 How will your facility ensure that procedures are in place so enough staff and resources are available to implement the Mon Valley Air Pollution Warning Phase within 24 hours of the notification from ACHD?

Facility supervisors have call-in lists if additional staff and/or resources are needed to implement the Mon Valley Air Pollution Warning Phase.

10 For every process and piece of equipment, list all available methods to reduce PM_{2.5}/PM₁₀ emissions from your four-year hourly average. During an actual warning phase, the actions to reduce emissions must last the length of the episode.

The following actions will be taken to reduce PM₁₀/PM_{2.5} emissions during a warning phase:

Shredding: A reduction of 20 tons/hr or 16.67% and the use of water sprays as needed.

Shearing: Inspections of shearing equipment and operation on a daily basis. A 0% reduction in emissions.

Torch Cutting: A reduction of 1 torch or 20% of the operating rate.

Material Handling: A reduction of 0% de minimis emissions.

Power Screen: The facility will shut down the power screen engine, a 100% reduction, during a warning phase.

Roadways: Additional watering of roadways will reduce roadway emissions by approximately 53%.

Comfort Heaters: Reductions of 0%.

Non-Ferrous Plants: Reduction of 0%.

11 For each piece of equipment and process, determine which emission reduction methods are feasible. List whether each method is feasible or infeasible and provide a justification for your determination.

Contractual obligations make the reduction techniques in block 10 difficult to be in place for consecutive days. The shearing, power screen, and paved road reduction and monitoring techniques are the only processes that

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are feasible to be in place for the entire warning phase. The reduction of the shredding operation is only capable of a 20 tons/hr or 16.67% reduction for a maximum of two days. The torch cutting operations for a 20% reduction for a maximum of five days.

The limited storage area and potential for environmental hazards increase after 48 hours. This is due to the nature of the material being processed. Metal and organic waste have the potential to catch fire. A method for limiting the potential for a fire is through the continuous processing of material and removal from site. The 4th Annual Reported Waste & Recycling Facility Fires US/CAN reported 317 fires in 2020. Metal recycling made up 34% of fires and organic recycling made up of 50%. This increases risk for auto recycling and other recycling that contain both inorganic and organic materials. The site feels comfortable allowing a maximum of two days of build up for the shredding plant and five day maximum for torch cutting.

Shredding operations utilize water sprays when needed, but over consumption of water compromises the integrity of the material being processed and the shredders integrity. The material being processed will utilize optimum moisture content contingent upon the shredder's capabilities.

Material handling for scrap activities have minimal emissions for the site and a 0% percent reduction during a warning phase.

Comfort heater are only utilized in the winter months. Turning the heater off during a warning phase is not feasible as it becomes a working hazard for spots on site that need to be heated.

Contractual obligations pertaining to the non-ferrous processing plant do not make the operation feasible to reduce.

- 12** How will your facility ensure that actions taken in block 10 are properly monitored, recorded, and reported to the Health Department?

Site Management will update daily and weekly records to note whether a Mon Valley Air Pollution Warning Phase occurred and the actions taken, if applicable. Site Management will document daily throughputs, daily equipment inspections, and the use of additional staff to meet the requirements during a warning phase.

- 13** Provide an active spreadsheet containing the following:

- Calculations of your facility's PM_{2.5} and PM₁₀ emissions for each of the past four years (2017-2020) in tons/year for every piece of equipment and process; **Emissions inventory not required 2017-2018 per ACHD. Non-ferrous processing plant not permitted until 2021.**

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- Calculation of average four year emissions of PM_{2.5} and PM₁₀ in lbs/hr for each piece of equipment and process; **Emissions inventory not required 2017-2018 per ACHD. Non-ferrous processing plant not permitted until 2021.**
- Feasible PM_{2.5} and PM₁₀ emission reductions in lbs/hr that will occur during a warning phase for every piece of equipment and process as well as the facility total; and **Assumed that PM₁₀ emissions from power screen engine have the potential to reduce by the maximum permitted emissions limit of 0.03 lbs/hr. PM_{2.5} emissions are not applicable to the power screen engine.**
- Feasible PM_{2.5} and PM₁₀ emission reductions in percent reduced from the hourly four year average for every piece of equipment and process as well as the facility total percent reduction. **Approximately a 17.5% reduction of the facility total for PM₁₀.**

This spreadsheet will be used to calculate actual emission reductions that will be reported to the Health Department after warning phases have ended.

14 How much time will be required for your facility to implement the emission reductions in block 10?

Implementation of emission reductions will take immediate effect.



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INSTRUCTIONS	
Submission Form for the Air Pollution Mitigation Plan	
Block 01 Facility Information	The facility name for the operation at that particular address should be used and not the name of the larger corporation. Use the address for the actual facility and not the company headquarters, if different. The most recent permit number should be included. If it is not known, it can be left blank.
Block 02 Environmental Contact Information	Fill in the contact information of the individual (e.g. employee or consultant) who will be contacted to provide environmental technical information for the Air Pollution Mitigation Plan
Block 03 Responsible Official Information	This address and phone number are for the office where the responsible official works the majority of the time. See block 04 instructions for information regarding the responsible official.
Block 04 Affidavit	This affidavit must be signed by the responsible official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. CORPORATION – President, Vice President, Secretary, Treasurer, or duly authorized person BUSINESS – Sole Proprietor or General Partner GOVERNMENT ENTITY – Ranking elected official or principal executive officer
Blocks 05–08 Watch Phase of Mitigation Plan	The responses that you provide in blocks 05 through 08 will be specific to your equipment and facility. Below are some general ideas that may help you in how to approach these requirements. <ul style="list-style-type: none"> • Staff related <ul style="list-style-type: none"> • 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 facility 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



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	<ul style="list-style-type: none"> • 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 facility 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 facility 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.
<p><u>Block 09</u> Warning Phase of Mitigation Plan</p>	<p>A good starting point in completing this block is to refer to the table found in section II of your facility’s air quality permit titled “Emission Unit Identification” and identify which units emit particulate matter. There may be other equipment, not listed in the section II table, that can be included in the block 09 list.</p>
<p><u>Block 10</u> Warning Phase of Mitigation Plan</p>	<p>Block 10 should explain what actions the facility could possible take to ensure that hourly emissions are reduced.</p> <p>Possible methods include:</p> <ul style="list-style-type: none"> • Reduction in material throughput • Reduction in operating time • Increased use of controls or suppression equipment • Changes in raw materials <p>Examples of possible actions include:</p> <ul style="list-style-type: none"> • 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 PM₁₀ creating fuel types or switch fuel types to lower PM_{2.5} or PM₁₀ as allowed by the relevant permits. • Bring in additional employees to allow the facility 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.



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	<ul style="list-style-type: none"> • Fully or partially enclose material movement and other work activities which produce dust and other particulate matter (PM_{2.5} or PM₁₀ emissions). • Modify work practices to decrease PM_{2.5} or PM₁₀ emissions such as: <ul style="list-style-type: none"> ○ Slowing material handling ○ Fully or partially enclose material movement and other work activities which produce dust and other particulate matter (PM_{2.5} or PM₁₀ 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 PM₁₀ emissions.
<p><u>Block 11</u> Warning Phase of Mitigation Plan</p>	<p>Emission reduction methods that are feasible can be eliminated from consideration for other reasons as long as adequate justification is given.</p>
<p><u>Block 12</u> Warning Phase of Mitigation Plan</p>	<p>The Health Department will require a report, submitted after the warning phase has ended, itemizing what actions were taken to meet the requirements of the warning phase.</p>
<p><u>Block 13</u> Warning Phase of Mitigation Plan</p>	<p>The spreadsheet must include actual plant emissions of PM_{2.5} and PM₁₀ for all equipment listed in block 09 for each of the past four years (2017-2020) in tons/year. These calculations can be copied directly from the spreadsheets submitted to the Health Department for emissions inventories.</p> <p>For each piece of equipment and process, emissions from the last four years must be provided in tons/year.</p> <p>For each piece of equipment and process, proposed feasible emission reductions must be provided in lbs/hr.</p> <p>The hourly average will be calculated for each unit and process by adding yearly emissions together and dividing by the total number of hours that the unit emitted over four years.</p> <p>In the case of a batch process, calculations will need to take into account the number of hours in each batch and the number of batches in a year.</p>

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<p><u>Block 14</u> Warning Phase of Mitigation Plan</p>	<p>Section 2106.06 of county air quality regulations requires that an affected facility is able to implement the requirements of the warning phase within 24 hours.</p>
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Mitigation Plan Checklist

The following checklist is provided as a list of items required for a complete mitigation plan submission. If at any time you have questions about your application, please call JoAnn Truchan 412-578-7981 or Jayme Graham 412-578-8129.

- Has the responsible official signed and dated the first page (block 04)?
- Have you provided an active spreadsheet showing actual emissions for every piece of equipment and process of PM_{2.5} and PM₁₀ for the past four years in tons per year?
- Does the spreadsheet include the average actual PM_{2.5} and PM₁₀ emissions from every piece of equipment and process for the past four years in lbs/hr? **2019-2020**
- Does the spreadsheet include the PM₁₀ and PM_{2.5} reduction that will be achieved from every piece of equipment and process in lbs/hr and % from the four year hourly average during the warning phase? **See block 13.**
- Have you provided a complete response for each of the fourteen blocks?



