

COUNTY OF



ALLEGHENY

RICH FITZGERALD  
COUNTY EXECUTIVE

**Air Quality Program**

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

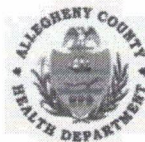
Name of Facility Dura-Bond Coating, Inc.  
Address 5 North Linden Street  
City State Zip+4 Duquesne, PA 15110  
Permit # 0834 Phone (412) 436-2419

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

Name/Title Dan Swearingen/General Manager  
Address 5 North Linden Street  
City State Zip+4 Duquesne, PA 15110  
Email dan.swearingen@dura-bond.com Phone (412) 436-2419

**03 Responsible Official Information**

Name/Title Jason Norris/President  
Address 2658 Puckety Drive  
City State Zip+4 Export, PA 15632  
Email jason.norris@dura-bond.com Phone (724) 327-0280



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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 December 21, 2021

Typed/Printed Name: Jason Norris



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### SUBMISSION FORM – AIR POLLUTION MITIGATION PLAN

**05** List all equipment or processes at your facility that emit PM<sub>10</sub> and/or PM<sub>2.5</sub>

- |                                        |                                          |
|----------------------------------------|------------------------------------------|
| P001 - Fusion Bond Preheaters          | P002-P003 - Fusion Bond Shotblast        |
| P004 - Fusion Bond Airwash             | P005-P008 - Fusion Bond Process Heaters  |
| P009 - Fusion Bond Material Handling   | F002 - Industrial Roads/Vehicle Tailpipe |
| P010 - Fusion Bond Coating Application | F003 - Sawing Station                    |
| NA - Comfort Heating Units             | (See Table I attached)                   |

### 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?

With focus on P009, P010, & F002; these 3 processes cumulatively constitute 83% of PM<sub>10</sub> & PM<sub>2.5</sub> facility emissions: During Watch Phase, review procedures (staff meeting/personal contact) with designated employees to ensure:  
Understanding of all restrictions, monitoring, work practices, & recordkeeping as mandated by OP #0834.  
Understanding of all components of our May 2015 "Plant Dust Control Plan" (attached).  
All of the above-referenced elements are summarized in attached Table II.

Note that regular staffing levels are more than sufficient to enable appropriate attention to ensure optimal equipment efficiency/operation.

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

With focus on P009, P010, & F002; these 3 processes cumulatively constitute 83% of PM<sub>10</sub> & PM<sub>2.5</sub> facility emissions: During Watch Phase, supervise designated employee implementation of each of the following:  
Implementation of all restrictions, monitoring, work practices & recordkeeping as mandated by OP #0834.  
Implementation of all components of our May 2015 "Plant Dust Control Plan" (attached).  
All of the referenced elements are summarized in attached Table II.

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

Watch Phase meetings (or personal contacts) with designated employees will be recorded, together with all Watch Phase actions to ensure compliance with the facility Operating Permit and the facility Fugitive Dust Control Plan. All such Watch Phase actions will be included in the appropriate Semiannual Report, or at any time at the request of the Department.



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### SUBMISSION FORM – AIR POLLUTION MITIGATION PLAN

#### 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?

The facility always maintains sufficient staffing to enable permit compliance and Fugitive Dust Control Plan compliance. Warning Phase implementation of the proposed additional actions/procedures to maximize reduction of particulate emissions will not necessitate (or benefit from) supplemental manpower.

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

With focus on P009, P010, & F002; these 3 processes cumulatively constitute 83% of PM<sub>10</sub> & PM<sub>2.5</sub> facility emissions:

P009 - enclosure; supplemental process inspections

P010 - enclosure; supplemental process & baghouse inspections; supplemental differential pressure monitoring

F002 - increased water suppression; ensured diesel idling (Act 124) compliance on facility property; notification of contract drivers in regards to Act 124 regulation to promote offsite compliance

Facility - supplemental VE/Fugitive Dust observations

**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.

Do to spacing constraints, please see "Block #11 Attachment".

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#### SUBMISSION FORM – AIR POLLUTION MITIGATION PLAN

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

Supplemental Warning Phase efforts/activities will be recorded. All such Warning Phase actions will be included in the appropriate Semiannual Report, or at any time at the request of the Department.

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

- Calculations of your facility's PM<sub>2.5</sub> and PM<sub>10</sub> emissions for each of the past four years (2017-2020) in tons/year for every piece of equipment and process;
- Calculation of average four year emissions of PM<sub>2.5</sub> and PM<sub>10</sub> in lbs/hr for each piece of equipment and process;
- Feasible PM<sub>2.5</sub> and PM<sub>10</sub> 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
- Feasible PM<sub>2.5</sub> and PM<sub>10</sub> 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.

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?

As the proposed remedies include supplemental inspections, monitoring, work practices, notifications, and daily facility observations, implementation of the proposed emission reductions can commence immediately. The proposed supplemental reductions will continue through the entire duration of the Warning Phase.

## Block #11 Attachment

**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.

During Warning Phase (See attached Table II):

P009 - process operates within full building enclosure; daily process inspection added

P010 - process operates within full building enclosure; daily process/baghouse inspection added; baghouse differential pressure monitoring increased from weekly to daily

F002 - water suppression increased from "as needed" to "daily"; diesel idling (Act 124) compliance enforced on Dura-Bond property. In the case of offsite transport by contract (non Dura-Bond) drivers, and although Dura-Bond has no offsite enforcement authority regarding non Dura-Bond personnel, we will notify drivers (provide DEP Act 124 Fact Sheets & answer questions), potentially reducing County PM2.5 idling emissions within (and outside of) the Mon Valley.

Facility - supplemental VE/Fugitive Dust observations increased from daily to 2/day

Note that Dura-Bond average actual emissions are very insignificant (PM10 - 1.65 tpy, PM2.5 - 0.58 tpy). Following the proposed reductions, Warning Phase emissions would be further reduced by 21% & 23% respectively. Difficult market conditions have led to average facility annual operating hours of only 1,205 hr/yr per the subject 4-yr interval. Further, market conditions are not expected to significantly change in 2022. Given that business backdrop, Dura-Bond is not in a position to further curtail or reduce operating hours or pipe throughput. To that end, the curtailment of operating hours and/or limitation of pipe throughput has been determined to be infeasible.

Note that regular staffing levels are more than sufficient to enable the proposed supplemental actions to ensure source operation in an environmentally responsible manner. No additional staffing would be necessary or beneficial in that regard.



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### SUBMISSION FORM – AIR POLLUTION MITIGATION PLAN

### 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<sub>2.5</sub> and PM<sub>10</sub> for the past four years in tons per year?
- Does the spreadsheet include the average actual PM<sub>2.5</sub> and PM<sub>10</sub> emissions from every piece of equipment and process for the past four years in lbs/hr?
- Does the spreadsheet include the PM<sub>10</sub> and PM<sub>2.5</sub> 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?
- Have you provided a complete response for each of the fourteen blocks?



**Table I**  
**Actual Emission Summary - PM10 & PM2.5 Specific**  
**(4-Year Lookback)**

Source ID	Facility Particulate Emission Sources	2017		2018		2019		2020		Average (4-yr)	
		PM10 (TPY)	PM2.5 (TPY)	PM10 (TPY)	PM2.5 (TPY)	PM10 (TPY)	PM2.5 (TPY)	PM10 (TPY)	PM2.5 (TPY)	PM10 (TPY)	PM2.5 (TPY)
P001	Fusion Bond Preheaters	0.014	0.014	0.017	0.017	0.010	0.010	0.008	0.008	0.012	0.012
P002-003	Fusion Bond Shotblast	0.041	0.004	0.054	0.005	0.036	0.004	0.025	0.003	0.039	0.004
P004	Fusion Bond Airwash	0.189	0.019	0.228	0.023	0.133	0.013	0.105	0.010	0.164	0.016
P005-008	Fusion Bond Process Heaters	0.062	0.062	0.075	0.075	0.044	0.044	0.034	0.034	0.054	0.054
P009	Fusion Bond Material Handling	0.432	0.152	0.562	0.198	0.329	0.116	0.220	0.078	0.386	0.136
P010	Fusion Bond Coating Application	0.345	0.122	0.449	0.158	0.262	0.093	0.176	0.062	0.308	0.109
F002	Industrial Roads	0.551	0.055	0.717	0.072	0.419	0.042	0.281	0.028	0.492	0.049
	Vehicle Tailpipe	0.204	0.204	0.266	0.266	0.156	0.156	0.104	0.104	0.183	0.183
NA	Comfort (Space) Heating Units	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
F003	Sawing Station	0.014	0.014	0.018	0.018	0.010	0.010	0.007	0.007	0.012	0.012
TOTALS		1.854	0.648	2.388	0.835	1.399	0.488	0.962	0.335	1.651	0.577

Source ID	Facility Particulate Emission Sources	2017		2018		2019		2020		Average (4-yr)	
		PM10 (lb/hr)	PM2.5 (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)
P001	Fusion Bond Preheaters	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
P002-003	Fusion Bond Shotblast	0.059	0.006	0.064	0.006	0.073	0.007	0.066	0.007	0.066	0.007
P004	Fusion Bond Airwash	0.272	0.027	0.272	0.027	0.272	0.027	0.272	0.027	0.272	0.027
P005-008	Fusion Bond Process Heaters	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089
P009	Fusion Bond Material Handling	0.620	0.219	0.669	0.236	0.673	0.238	0.572	0.202	0.634	0.224
P010	Fusion Bond Coating Application	0.495	0.175	0.534	0.189	0.537	0.190	0.457	0.161	0.506	0.179
F002	Industrial Roads	0.791	0.079	0.854	0.085	0.859	0.086	0.730	0.073	0.809	0.081
	Vehicle Tailpipe	0.293	0.293	0.317	0.317	0.319	0.319	0.271	0.271	0.300	0.300
NA	Comfort (Space) Heating Units	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
F003	Sawing Station	0.019	0.019	0.021	0.021	0.021	0.021	0.018	0.018	0.020	0.020
TOTALS		2.661	0.931	2.843	0.994	2.867	1.000	2.499	0.871	2.717	0.949

\* There are 28 separate Excel Spreadsheets which feed this "summary spreadsheet".

\*\* Emissions were generated from previous comprehensive inventory work-ups and together with ongoing "operational input data" per historic Semiannual Reports (2017-2020).



**TABLE II**

**Dura-Bond Duquesne  
Existing Emission Reduction Implementation (Watch Phase)**

P009	FB Material Handling	OP	V.E.1.c	Emission Limitations
P010	FB Coating Application	OP	V.E.1.b	Maintain baghouse according to manufacturer specs
		OP	V.E.1.c	Emission Limitations
		OP	V.E.3	Monitor differential pressure weekly
F002	Industrial Roads	OP	V.F.1.c.1	Use of water sprays and dust suppressants
		OP	V.F.1.c.2	Maintain speeds < 10 mph
		FDP	III.C.a	Maintain onsite 3,000 gal water truck & 1,000 gal water standby truck (use as needed)
		FDP	III.C.b	Maintain onsite street sweeper (use as needed)
		FDP	III.C.c	Periodically re-gravel unpaved roadways (as needed)
F002	Vehicle Tailpipe	-	-	No existing Operating Permit or Fugitive Dust Control Plan "requirement"
NA	Entire Facility	FDP	II	Conduct daily VE & Fugitive Emission Observation
		FDP	III.A-C	Implement Corrective Actions as necessary

**Dura-Bond Duquesne  
Additionally Proposed Emission Reduction Implementation (Warning Phase)**

					Feasible Emission Reductions	Cumulative Feasible Emission Reductions
P009	FB Material Handling	Extra	NA	Conduct daily process inspection	10%	10%
P010	FB Coating Application	Extra	NA	Conduct daily process/baghouse inspection	10%	20%
		Extra	NA	Increase differential pressure monitoring to daily	10%	
F002	Industrial Roads	Extra	NA	Ensure daily watering (unless weather conditions prohibit as a reasonable action)	10%	10%
F002	Vehicle Tailpipe	Extra	NA	Ensure Act 124 Notification to all drivers (Dura-Bond or contracted, applicable on property and off)	20%	20%
NA	Entire Facility	Extra	NA	Increase VE & Fugitive Emission Observations to 2/day	10%	10%

**Table III**  
**Projected Emission Reductions (Warning Phase)**

**(TPY)**

Source ID	Facility Particulate Emission Sources	Average (4-yr)		Estimated Reduction	PM10 Reduction	PM2.5 Reduction
		PM10	PM2.5			
		(TPY)	(TPY)	(%)	(TPY)	(TPY)
P009	Fusion Bond Material Handling	0.386	0.136	10%	0.039	0.014
P010	Fusion Bond Coating Application	0.308	0.109	20%	0.062	0.022
F002	Industrial Roads	0.492	0.049	10%	0.049	0.005
	Vehicle Tailpipe	0.183	0.183	20%	0.037	0.037
-	Entire Facility	1.651	0.577	10%	0.165	0.058
	Totals	1.651	0.577	-	0.351	0.135
Percent Reduction of <i>Total Facility</i> Annual Average Emissions					21.3%	23.3%

**(LB/HR)**

Source ID	Facility Particulate Emission Sources	Average (4-yr)		Estimated Reduction	PM10 Reduction	PM2.5 Reduction
		PM10	PM2.5			
		(lb/hr)	(lb/hr)	(%)	(lb/hr)	(lb/hr)
P009	Fusion Bond Material Handling	0.634	0.224	10%	0.063	0.022
P010	Fusion Bond Coating Application	0.506	0.179	20%	0.101	0.036
F002	Industrial Roads	0.809	0.081	10%	0.081	0.008
	Vehicle Tailpipe	0.300	0.300	20%	0.060	0.060
-	Entire Facility	2.717	0.949	10%	0.272	0.095
	Totals	2.717	0.949	-	0.577	0.221
Percent Reduction of <i>Total Facility</i> Annual Average Emissions					21.2%	23.3%

# Dura-Bond Coating, Inc.

## Plant Dust Control Plan

Prepared May 2015

### I) Potentially Significant Sources of Particulate Emissions

#### A) Visible Emission Sources

These units are point sources, employing dust collectors and exhausting (horizontal) directly to ambient air:

- 1) Shot Blast Unit (P002)
- 2) Shot Blast Unit (P003)
- 3) Fusion Bond Air Wash (P004)

#### B) "Indoor" Fugitive Emission Sources

Emissions from these units exhaust within a building enclosure:

- 1) Fusion Bond Material Handling (P009)
- 2) Fusion Bond Spray Booth with dust collector (P010)
- 3) Sawing Station (H02)

#### C) "Outdoor" Fugitive Emission Sources

Emissions from these sources rely on the implementation of control measures (or treatment as an unauthorized activity):

- 1) Vehicle Travel over Unpaved Roads (F002)
- 2) Open Burning [allowed only in special circumstances in accordance with Article XXI @ 2105.50(a)(1)]

### II) Monitoring Plan

Although not specifically required by permit (#0834-I001), Dura-Bond will conduct a daily observation (when operating) for the "presence" of *visible emissions*, as well as for *fugitive emissions* emanating either from the building enclosure or from vehicle travel across facility unpaved roads. Recordkeeping for these observations will be maintained in the plant office.

Where daily observations indicate a potential problem regarding visible emissions or fugitive dust, the facility will expeditiously engage in corrective action(s) to remediate the issue. Adequate recordkeeping for implemented corrective actions will be similarly maintained.



### III) Action Plan

#### A) Visible Emission Sources

The facility permit (#0834-I001) establishes the terms and conditions for ensuring proper dust collector operation on an ongoing basis. In the event of an observation of the “presence of visible emissions”, the facility would investigate the cause of any such upset condition and initiate corrective action(s) in an expeditious manner.

#### B) “Indoor” Fugitive Emission Sources

In the event of an observation of fugitive emissions emanating from the enclosure housing one or more of these sources, the facility will investigate the possibility of an upset condition, an enclosure breach, or other precipitating event; then remediate in an expeditious manner.

#### C) “Outdoor” Fugitive Emission Sources

##### 1) Industrial Roads

Unpaved roads will be attended on an ongoing basis, as necessary to prevent the generation of airborne fugitive dust in accordance with the following actions:

- a) Vehicle watering as necessary; the facility will maintain onsite, a 3,000 gallon water truck and a 1,000 gallon water truck (standby) to be used on an as needed basis
- b) The facility will maintain an onsite street sweeper to attend to “carry-out materials” on an as needed basis
- c) The facility will periodically re-gravel (trucks pulverize gravel over time) unpaved roadway portions on an as needed basis

##### 2) Open Burning

The facility will direct all personnel that open burning will not be allowed except in accordance with Article XXI @ 2105.50(a)(1), allowing for burning conducted *solely* for the provision of worker warmth (generally acceptable at temperatures  $\leq$  40°F). Where daily observations detect unauthorized open burning, such activity will be stopped immediately.