

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office

TO AQ Case File TVOP-65-00053

FROM Noor Nahar *Nn.*
Air Quality

THROUGH Barbara Hatch, P.E. *BHA*
Acting Program Manager
Air Quality

DATE May 15, 2015

RE Review of Title V Operating Permit renewal Application
Dura-Bond Steel Corporation
Export Borough
Westmoreland County

APS 738371 AUTH 861906 PF 263045

Background:

Dura Bond Coatings, Inc. is a specialty fabricator and coater of steel pipe and metal products located in Export Borough, Westmoreland County. Their products are used by the natural gas industry, pilings for dams and piers, and other heavy-duty construction applications.

As a result of the levels of VOCs & HAPs emitted, Dura Bond Coatings, Inc. is a major stationary source as defined in Title I, Part D of the Clean Air Act Amendments. This facility's potential to emit exceeds 50 tons/year of VOC emissions. The initial Title V Operating Permit for this facility was issued on June 20, 2000, an expiration date of June 20, 2005. The first Title V renewal was issued on April 26, 2006 with an expiration date of April 26, 2011. The Department received the second completed renewal application on October 26, 2010. There is no change in the facility since the issuance of the last permit renewal.

Regulatory Analysis:

Per Pa. Code Title 25 Section 127.402(a), a permit is required to operate a stationary air contamination source. The applicable emission limitations, monitoring, recordkeeping, reporting and work practice standard requirements of Pa. Code Title 25 Sections 123.1, 123.2, 123.13, 123.21, 123.31, 123.41, 123.42, 127.44, 135.5, 129.14, 129.51 and 129.52 have been included in this TVOP Renewal.

Subpart MMMM—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products: This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities that are major for HAPs. Dura Bond is major for HAPs. The applicable requirements of this rule are included in the TVOP.

The applicability of 40 CFR 63, Subpart XXXXXX—National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories has been evaluated for this site. In accordance with 40 CFR §63.11514, “you are subject to this subpart if you own or operate an area source that is primarily engaged in the operations in one of the nine sources” However; the facility is a major source for HAPs, so this regulation does not apply. There are no other NSPS or NESHAP requirements for this type of operation.

All the applicable requirements from Title 25 of the PA Code as well as appropriate monitoring, recordkeeping and reporting requirements have been included in this TVOP renewal.

Emissions and Controls:

The primary operations at this facility include shot blasting, sand blasting, coating and fabrication. The steel pipes and other metal products are cleaned by sandblasting or shot blasting. Shotblasting of small irregular-shaped metal objects is conducted by hand in a large enclosed room, which is controlled by a Wheelabrator dual-baghouse that is vented outdoor. In addition, automatic shotblasting of smaller pieces of pipe or metal is done using the electric Wheelabrator Shot Blast Machine which controlled by the Wheelabrator baghouse which is vented outdoor or by a backup Torit baghouse that is vents indoor. Both shot blasting operations are independent from each other and can occur simultaneously. Ferrous material is collected from both baghouses, placed into a large roll-off container, covered, and sent to a landfill.

Sandblasting is conducted in a separate warehouse building with two large open-bay doorways with large canvas curtain strips. New sand is stored onsite in a large tank where electric compressors pump it into the air tank within the building. Used sand is stockpiled inside the warehouse building. The sand is used only once and then hauled away. There are no controls for this process.

After cleaning, the materials are coated in the spray area using airless spray guns. Materials are then placed in the day down area for drying and curing. Sometimes, they are forced cured using portable natural gas heaters. There is no filtration system in place and no outdoor stacks. This is the primary source of emissions at this facility.

Fabrication work is done in a separate building. It includes typical machine shop/metal fabrication equipment such as grinders, welding stations, saws, torching, etc. Two types of welding occur here: Submerged Arc and Flux Cored Arc. The amount of welding wire (electrode) used is tracked. During the radial saw arm operation, dust is collected via a small dust collector (Wack MFG) which vents indoor. Materials are then ready to be shipped.

The facility has an area that is used as needed for distillation of dirty solvent occurs within its own small building. Dirty solvent is brought into this building in 55 gallon drums. Solvent goes thru a 15 gallon electric solvent recovery unit (distiller) thru a 5-hour cycle which recovers some of the good solvent for re-use. The remaining dirty solvent sludge is bagged and kept in drums where it is disposed as HazMat at a landfill. There is no filtration or stacks in this small building.

The facility uses a water truck to control dust. Company reported that sandblasting operations are discontinued during high wind events to limit potential for fugitive emissions.

VOC emissions emanate from the coating and cleaning operations. The potential VOC emissions limit of 92 tons per year was established in the initial Title V permit for this facility. Other minor emissions of PM10, NOx, SOx and CO are from natural gas fired heaters, shot blasting, sandblasting, welding and roadways. Tables below show the actual emissions from the facility for 2012 and 2013.

| Year | Criteria Emissions (TPY) | | | | |
|------|--------------------------|--------|------------------|--------|---------|
| | CO | NOx | PM ₁₀ | SOx | VOC |
| 2012 | 0.3030 | 0.3600 | 17.5940 | 0.0020 | 16.8490 |
| 2013 | 0.3755 | 0.4470 | 13.7100 | 0.0025 | 16.1745 |

| Year | 112b HAPs Emissions (TPY) | | | | | | | | | | |
|------|---------------------------|--------|--------|--------|--------|--------|-------------------------------|--------|----------|----------|----------|
| | Total HAPs | Cr | Co | E-Ben | Mn | Ni | C ₇ H ₈ | Xyl | m-Xylene | o-Xylene | p-Xylene |
| 2012 | 9.9057 | 0.0010 | 0.0007 | 1.6700 | 0.4520 | 0.0020 | 0.5200 | 1.2600 | 3.2800 | 1.0800 | 1.4500 |
| 2013 | 8.815 | 0.0015 | 0.0070 | 1.6100 | 0.4835 | 0.0030 | 0.3800 | 1.3900 | 3.2800 | 0.6900 | 0.9700 |

| Year | Other/Non 112b Emissions (TPY) | | | |
|------|--------------------------------|---------|------------------|-----------------|
| | CO ₂ | Methane | N ₂ O | PM, condensable |
| 2012 | 433.1000 | 0.0080 | 0.0070 | -- |
| 2013 | 536.6600 | 0.0105 | 0.0100 | 0.0255 |

Conclusions and Recommendations:

I have completed my review of Dura Bond Coatings, Inc. TVOP renewal permit application in Export Borough, Westmoreland County. Dura Bond has met all the regulatory requirements associated with the renewal application submittal. Most recent inspection indicates that facility is in compliance with all the regulatory requirements. The attached proposed permit reflects terms and conditions as described in this permit application. It is my recommendation to issue a proposed Title V Operating Permit renewal for this facility. Notice of intent to issue this TVOP will be published in Pa Bulletin and local newspaper. Company, inspector and EPA will be provided with this proposed TVOP.