PERMITTEE

Specialty Maintenance and Construction, Inc.
Division of MetalTek International
4015 Drane Field Road
Lakeland, Florida 33811

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637-7600

PROJECT

Air Permit No. 1050445-002-AC
Minor Air Construction Permit
Specialty Maintenance and Construction Inc. – Plant 1

Specialty Maintenance and Construction, Inc., Division of MetalTek International, operates the existing metal fabrication facility located in Polk County at 4015 Drane Field Road in Lakeland, Florida. This project is an after-the-fact air construction permit to expand the existing facility by installing a new spray booth and expand the size of the existing spray booth and the abrasive blasting enclosure.

NOTICE AND PUBLICATION

The Permitting Authority distributed a draft minor air construction permit package on March 12, 2013. The applicant published the Public Notice in the Polk County Press on March 13, 2013. The Permitting Authority received the proof of publication on March 14, 2013. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

Applicant

On March 22, 2013, the Permitting Authority received comments from the applicant. The following summarizes the comments and the Permitting Authority's response.

The applicant made the following comment on the Technical Evaluation and Preliminary Determination (TEPD).

1. IV. Summary of Emissions - For VOC emission from the Surface Coating Operation (EU 001), a figure of 23.04 tons per year (TPY) is shown for Potential Emissions. This figure appears to be out of place, and instead, should be the figure for Allowable Emissions of particulate matter from Source 002 – Abrasive Blasting. For the Abrasive Blasting process, on page 33 of the application forms, we showed allowable emission rates of 5.26 pounds per hour (lbs/hour) and 23.04 TPY. These allowable emission rates were based upon the process weight rate equation. Given that these are also the enforceable restrictions to which the emission source is held, it is our opinion that 5.26 lbs/hour and 23.04 TPY are the Potential Emissions for Abrasive Blast system (002).

   Potential Emission from Source 001 – Surface Coating should be 24.0 TPY as shown on page 19 of the application forms and as indicated in the Calculations attached with the application.

Response - All concerns were addressed with the applicant in a teleconference held on March 25, 2013. The table provided in the TEPD compared the calculated potential emission for the project to the allowable emission limits. The facility does not produce a finished product through a chemical or physical change; therefore, the abrasive blasting operation (EU 002) is not subject to a particulate matter emission limit pursuant to Rule 62-296.320(4)(a), F.A.C. Process Weight Table. Potential VOC emissions for the surface coating operation should read 23.6 TPY.

The applicant made the following comments on the Draft Permit.

1. Section 1, Project Description and Proposed Emission Units - We offer the following correction to the final paragraph on page 3: To control emissions of PM. The spray booth~~s~~ exhausts ~~stacks~~ are equipped with filters and the abrasive blasting enclosure will be equipped with a dust collection system.

   Response - This clarification was made.

2. Section 2, Administrative Requirements - It is not clear whether an annual operating report will be required by April 1, 2013 for calendar year 2012. We ask that the Department add language to clarify the date the first report will be due.

   Response – No, the annual operating report will not be required on April 1, 2013 for calendar year 2012. The annual operating report will be required on April 1, 2014 for the calendar year 2013.

3. Section 3, Surface Coating Operations (EU 001), Emission Unit Description - We offer the following correction to clarify that the spray booth filter are located prior to each exhaust stack: Emissions of PM are controlled in the spray booths by a double array of dry filter media located ~~on~~ prior to each exhaust stack.

   Response - This clarification was made.

4. Section 3, Abrasive Blasting Operation (EU 002), Specific Condition B.1. Permitted Capacity – While this is consistent with the maximum throughput we can expect due to production restriction within the facility, and we do acknowledge that our calculations did use 1,800 TPY of blast media to estimate expected actual emission rates, we ask that this restriction not be included in the final permit. In the application at page 32 of the application forms, we indicated a maximum throughput of 4 million lbs/year of blast media (2,000 TPY).

   We showed allowable emission rates of 5.26 lbs/hour and 23.04 TPY on page 33 of the application forms. These allowable emission rates were based upon the process weight rate equation, the maximum hourly process rate including steel parts and 1,800 lbs/hour of blast material and 8,760 hour of operation per year, which can only result if throughput is allowed to be 7,884 tons of blast material per year. Eliminating the restriction on blast material use will result in an annual emission rate of 5.4 tons of total particulate matter per year, using emission factors published by the USEPA. We note that the draft permit would allow 8,760 operating hours per year. We also note that in the application at page 10 of the application forms, we did not request an emission cap for PM on the basis that no cap was needed to maintain status as a minor source.

   Response – The maximum permitted capacity of 1,800 TPY of blast media was based on the emission calculations provided in the application. As noted above, the abrasive blasting operation is not subject to a particulate matter emission limit pursuant to Rule 62-296.320(4)(a), F.A.C. Process Weight Table; therefore the permit did not have a PM emission limit or cap.

5. Section 3, Abrasive Blasting Operation (EU 002), Specific Condition B.3. Visual Emissions Limitation – Rule 62-296.320(4)(b)1., F.A.C. establishes a Visible Emission Limitation of 20% opacity rather that the 5% opacity cited in the draft permit condition, and while Rule 62-4.070(3), F.A.C. allows the Department to issue any permit with specific conditions necessary to provide reasonable assurance that Department rules can be met, we do not believe it necessary to establish Visible Emission Limit of 5% instead of 20% to provide this assurance.

The applicant provided the following summarized reasons to remove the visible emission limit of 5% and all corresponding compliance testing requirements:

a. Emissions from the abrasive blast operation will be controlled by fabric filtration (dust collector), which is expected to achieve an outlet loading of substantially less that 0.001 to 0.004 grains/dry standard cubic feet. The filter media has a rating greater than 99.8% removal efficiency for particulate matter for particle sizes of 0.5 microns and larger. This equates to an estimated particulate matter emissions of 1.2 TPY.

b. The abrasive blasting operation is subject to National Emission Standards of Hazardous Air Pollutants (NESHAP) Subpart XXXXXX of 40 Code of Federal Regulations (CFR) 60, NESHAP for Area Sources for Nine Metal Fabrication and Finishing Source Categories not yet adopted by the State of Florida, which establishes visible emission limits according to USEPA Method 22 with associated corrective action programs.

c. The use of Method 9 is not practical if the opacity restriction remains at 5%. This method has an accuracy generally accepted to be plus or minus 7.5% and requires a certified observer. EPA Method 22 as required by the NESHAP is more appropriate.

Response - USEPA Method 22 is applicable for the determination of the frequency of fugitive emissions produced during material processing, handling and transfer operations from stationary sources. This method determines the amount of time that visible emissions occur during the observation period. This method does not require that the opacity of emissions be determined and observer certification is not required. Therefore, to provide reasonable assurance that the dust collector is properly maintained and operated, the Department requires a visible emissions limitation of 5% opacity observed from the exhaust of the abrasive blasting enclosure to be done in accordance with Method 9.

CONCLUSION

The changes made in the draft permit are insignificant in nature and do not impose additional public noticing requirements. The permitting authority hereby issues the FINAL Permit with the changes noted above.