TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Hentzen Coatings, Inc.
3967 W. Mill Road, Milwaukee, WI 53218-1225

Clearwater Facility
5182 126th Avenue, Clearwater

Facility ID No. 1030553

PROJECT

Project No. 1030553-001-AC
Application for Minor Air Construction Permit
Initial Air Construction Permit for Existing Facility

COUNTY

Pinellas County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

June 11, 2013

Prepared by David Zell

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Facility Description:

The existing facility manufactures high performance powder coatings for architectural, marine, aerospace, and industrial use. The facility processes raw material powder coating components that are shipped to the facility in bags. These raw materials consist of resins, fillers, crosslinkers, pigments, dyes, and various additives. Some of these materials include metal hazardous air pollutant (HAP) components. The powdered raw materials are sent to a mixer where various components are combined. The powdered output from the mixers is sent to one of four (4) electric extruders, where the powdered components are melted, mixed, and discharged. The coatings come out of the extruders as brittle solid sheets. The sheets are then mechanically broken in one of four (4) electric chippers and the chipped material is placed into totes or drums. The chips are then ground to a powder in one of three (3) mills (EU Nos. 001, 002 and 003) and transferred off-site as final product. Each mill exhaust is controlled by a baghouse dust collector to control particulate matter (PM) emissions. These three (3) baghouses each exhaust outside the building.

Two smaller baghouses are also present at the facility. The first baghouse is a small dust collector associated with the plastic (melanine) grit blaster (EU No. 004) that is used to clean the extruder equipment. This grit blaster dust collector is located inside the facility building and vents inside the building. The second baghouse is a small dust collector associated with the plant air ventilation system (EU No. 005). This system picks up air from various transfer points (layup, weighing area, etc.) and it is passed through the air ventilation system dust collector and the cleaned air is recirculated back into the building. This air ventilation system dust collector is located inside the facility building and vents inside the building.

II. Project Description:

A. Applicant:

Mr. Steven Hentzen, Vice President
Hentzen Coatings, Inc.
3967 W. Mill Road
Milwaukee, WI 53218-1225

B. Professional Engineer:

Mr. Brad James, P.E.
Trinity Consultants
53 Perimeter Center East, Suite 230
Atlanta, GA 30346

C. Project Location:

The existing facility is located at 5182 126th Avenue in Clearwater, Pinellas County.

D. Project Summary:

These concurrently processed projects are an initial air construction permit and initial air operation permit for this existing facility, after it was determined that this facility requires an air permit. The permitted emissions units (EUs) will be: the three mills - Mill Nos. 1, 2 and 3 (EU Nos. 001, 002, and 003 respectively), each with a baghouse dust collector; the grit blaster (EU No. 004), with a baghouse dust collector; and the plant ventilation system (EU No. 005), with a baghouse dust collector. Both the Grit Blasting Dust Collector and the Plant Ventilation System Dust Collector exhaust vents are inside the production building, so emissions from these emissions sources will impact the outside ambient air as fugitive emissions from the production building doors and vents.

E. Application Information:

Application Received and Complete on: April 17, 2013

(Application Review Note – An email was sent to the applicant and their consultant on 05/02/13 to clarify information in the application. A response was received from their consultant on 05/10/13.)

III. Applicable State and Federal Regulations

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	**Y/N**	**Comments**
Rule 62-210.300, F.A.C. – Permits Req'd	Y	subject to general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	facility is not a PSD major source
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Milling operations (EU Nos. 001-003) are subject to Rule 62-296.320(4)(a), F.A.C. (Process Weight Table) since they produce a finished product through a physical change (grinding) in the materials being processed; and indoor manufacturing operations (EU Nos. 004 & 005) will be a source of unconfined particulate matter emissions through building doors and vents.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	manufacturing operations could be a source of odors
Rule 62-296.401-418, F.A.C. - Stationary Source Emission Standards	N	there is no applicable source category
Rule 62-296.500, F.A.C. - Reasonably	N	facility is not a significant source of VOC emissions

Subject to:	Y/N	Comments
Available Control Technology (VOC)		
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	this is a new source, therefore not subject to the PM RACT rule
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	N	This facility is subject to NESHAP 40 CFR 63 Subpart CCCCCCC (7C) – National Emission Standard for Area Sources: Paints and Allied Products Manufacturing. However, this NESHAP has **not** been adopted by Florida in Rule 62-204.800(11)(b), F.A.C. and therefore its requirements are not included in these Florida DEP air permits.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	facility is a synthetic non-Title V source
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE testing is required for EU Nos. 001 – 003

IV. Summary of Emissions

Pollutant	EU No. and Brief Description	Allowable Emissions (lbs/hr.)	Potential Emissions (tons/yr)
PM/PM10	001 – Mill No. 1 (w/baghouse emissions control device)	0.51 [1]	2.25 [2]
	002 – Mill No. 2 (w/baghouse emissions control device)	0.26 [1]	1.13 [2]
	003 – Mill No. 3 (w/baghouse emissions control device) 3	0.09 [1]	0.38 [2]
	004 – Grit Blaster (w/baghouse dust collector emissions control device)*	*NA*	1.35 [3]
	005 – Plant Air Ventilation System (w/baghouse dust collector emissions control device)*	*NA*	6.38 [3]
	Total		**11.49**
HAPS *(as PM)* [4]	From EU Nos. 001 through 005		
	Antimony and/or Nickel Compounds		2.30
	Chromium Compounds		0.57
	Cobalt Compounds		0.57
	Total		**3.45**

Allowable and Potential Emissions Notes –

[1] Allowable lbs/hour emissions from each of these mills is based upon the baghouse dust collector vendor guarantee of a maximum outlet (exhaust) grain loading concentration of 0.02 gr/dscf and the maximum baghouse design air flow rate (scfm). These allowable emission rates are much lower than, and therefore satisfy the requirements of, the Rule 62-296.320(4)(a), F.A.C. process weight table formula limits.

[2] Potential tons/year emissions from each of these mills are based upon the allowable lb/hr emission rate and operation for 8,760 hours/year.

[3] Potential fugitive emissions from EU Nos. 004 and 005 were assumed to be equal to the controlled emissions from the two small baghouses that emit inside the production building (the Grit Blaster Dust Collector and the Plant Ventilation System Dust Collector). That is, it was assumed that all PM emitted from these baghouse exhausts could/would become fugitive emissions through the building openings.

[4] Potential HAP emissions from the facility are based upon the maximum of the percent HAP (by weight) range for representative formulations manufactured by this facility, and the total facility PM emissions shown above.

V. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

VI. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).