TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Townley Foundry and Machine Company, Inc.
10551 S.E. 110th Street
Candler, Florida 32111

Townley Foundry and Machine Company

Facility ID No. 0830060

PROJECT

Project No. 0830060-005-AC
Application for Air Construction Permit
Project Name: Various Changes No. 1

COUNTY

Marion County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Central District Office
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

November 28, 2011

Prepared by Jeffrey Rustin, P.E.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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. Project Description:

A. Applicant:

Mr. Toro Townley, President
Townley Foundry and Machine Company, Inc.
10551 S.E. 110th Street
Candler, Florida 32111

B. Professional Engineer:

Mr. Maxwell R. Lee, P.E.
Koogler and Associates, Inc.
4014 N.W. 13th Street
Gainesville, Florida 32609

C. Project Location:

Townley Foundry and Machine Company, Inc.
10551 S.E. 110th Street
Candler, Florida 32111

D. Project Summary:

This project authorizes various changes such as increasing the allowable operational hours (operate continuously), increasing the facility-wide VOC emission limit, replacing a control device, adding an additional blasting room, replacing a mechanical mold sand reclamation unit, and adding two additional filter systems. Additionally, it authorizes the construction of a thermal mold sand reclamation unit that uses thermal decomposition to recycle mold sand. It is an exempt source (Rule 62-210.300(2)(b), F.A.C.). Additionally, the anneal oven system will be classified as two (2) anneal ovens and both ovens are exempt sources (Rule 62-210.300(2)(b), F.A.C.).

E. Application Information:

Application Received and Complete: 09/22/2011

II. Rule Applicability

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 62-212.400, 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	Facility is a source of unconfined particulate matter emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Induction furnaces are sources of VOC and odors.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	There is no applicable source category.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Marion County is an attainment area for ozone.
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category.

Subject to:	Y/N	Comments
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	The facility's spark ignition internal combustion engine (SI ICE), **is not subject** to 40 CFR 60, Subpart JJJJ.
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)	Y	Facility is considered an existing small foundry melting less than 6,000 tons of metal per year; therefore, this facility **is subject** to 40 CFR 63, Subpart ZZZZZ.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	Facility is a synthetic non-Title V source.

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy)
PM/PM10	002- Sandblasting Booth	5.4	
	003- Melting, Molding, and Grinding	19.1	
	004- new Mechanical Mold Sand Reclamation	8.24	
	Total	**32.74**	
VOC	**Total**	**Less than 74.0**	**Less than 74.0**
Total HAP	**Total**	**Less than 25.0**	**Less than 25.0**

IV. Federal NSPS and/or NESHAP Provisions

A. Facility has one Generac spark ignition internal combustion engines (SI ICE), this engine does not meet the applicability compliance date and therefore, **is not subject** to 40 CFR 60, Subpart JJJJ- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Engine No.	Location	Model	S/N	Engine Power	Purchase Date	Rule Applicability
1	Grind Shop	QT04554KVANA	4697728	45kW	04/24/07	None

B. Facility is considered an existing small foundry melting less than 6,000 tons of metal per year and therefore, **is subject** to 40 CFR Part 63, Subpart A-General Provisions and 40 CFR Part 63, Subpart ZZZZZ-National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources.

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, Central District, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767.

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).