TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Modern Silicone Technologies, Inc.
10601 U.S. Highway 19 North
Pinellas Park, FL 33782

Pinellas Park Facility

Facility ID No. 1030563

PROJECT

Project No. 1030563-001-AC
After-the-Fact Construction Permit

COUNTY

Pinellas County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air and Solid Waste Permitting
Southwest District Office
Temple Terrace, Florida 33637-0926

December 5, 2014

Prepared by Sara Gonzalez

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:

This is a plastic injection molding facility that produces a variety of custom-design gaskets.

II. Project Description:

A. Applicant:

Mr. Matt Algate, Plant Manager
Modern Silicone Technologies, Inc.
10601 U.S. Highway 19 North
Pinellas Park, FL 33782

B. Professional Engineer:

Mr. Timothy E. Denhof, P.E.
Vanguard Environmental, Inc.
240 E. Lake Street, Suite 101
Addison, IL 60101

C. Project Location:

10601 U.S. Highway 19 North
Pinellas Park, FL 33782

D. Project Summary:

This permit is for the after-the-fact construction and operation of a plastic injection molding operation that produces a variety of custom-design gaskets. This facility utilizes silicone, polypropylene and nylon based resins in the molding process, which is not considered to be a source

of air emissions. Operation activities also include a "priming" process and mold cleaning. The "priming" process utilizes a mixture of petroleum distillate compounds for the purpose of coating nylon-based gaskets. Coating is accomplished by dipping the gaskets in the distillate compound. Mold cleaning activities involve the use of solutions that contain chlorinated solvents and alcohols to clean the molds between uses. The petroleum distillate compounds and mold cleaning compounds utilized at the facility are sources of VOC and HAP emissions.

E. Application Information:

Application Received on: November 6, 2014
Additional Information Requested on: November 24, 2014
Additional Information Received on: December 3, 2014
Application Complete on: December 3, 2014

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 Required	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	N	not expected to be 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	coating and cleaning compounds used at the facility are sources of VOC emissions and possibly 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 Available Control Technology (VOC)	N	there is no applicable source category
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	this is a new source, therefore not subject to 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	there is no applicable source category

Subject to:	**Y/N**	**Comments**
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.	N	testing is not required.

IV. Summary of Emissions

Pollutant	**EU No. and brief description**	**Potential Emissions** (tpy)	**Allowable Emissions** (tpy)
VOC	001	44.3	44.3
Total HAP	001	3.0	3.0
VE	001		less than 20% opacity

Notes:
(1) The VOC and HAP potential emissions for EU 001 were set equal to the allowable limits requested by the applicant.
(2) VE opacity limit is based on the Rule 62-296.320(4)(b), (General Visible Emissions Standard).

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).