TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

FOR

Sterling Manufacturing
8293 Consumer Court Plant
(Corian[R] Kitchen Countertop Manufacturing Facility)

Sarasota County

Permit Application Number

1150151-003-AC & 1150151-004-AO
(one document)

Sarasota County Parks, Recreation and Natural Resources

Air & Water Quality

Sarasota, FL

February 20, 2012

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COMMUNITY SERVICES, Parks, Recreation and Natural Resources, Air & Water Quality •
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I. Project Description:

A. Applicant:

Sterling Manufacturing
8293 Consumer Court
Sarasota, FL 34240

Mr. Tom Shapiro, President

B. Engineer:

Mr. Lynn Robinson
Southern Environmental Sciences, Inc.
1204 North Wheeler Street
Plant City, Florida 33563

C. Project and Location:

The applicant proposes to modify their state air construction permit to increase the hours of operation from 40 hrs/ wk to 80 hrs/ wk; with concurrent issue of an air operation permit *NOTE: The air construction permit is federally enforceable.* The permits will be issued as one document. The facility manufactures kitchen countertops using DuPont Corian^{R} solid surface material. Sterling Manufacturing fabricates the Corian^{R} by cutting/ routing/ sanding/ buffing and seamlessly joining pieces using Corian^{R} joint adhesive COR004 (Parts A and B). Denatured alcohol is used for cleaning purposes. The facility is located at 8293 Consumer Court, Sarasota, FL 34240.

D. Process and Controls:

The applicant fabricates the Corian^{R} by cutting/ routing/ sanding/ buffing and seamlessly joining pieces using Corian^{R} joint adhesive COR004 (Parts A and B). Denatured alcohol is used for cleaning purposes. Potential emissions from the facility are 9.8 tpy (or 0.03 grains/ dscf) particulate matter (PM), 4.74 tpy total Volatile Organic Compound (VOC), 2.61 tpy total Hazardous Air Pollutants (HAPs), and 2.23 tpy maximum individual HAP (i.e., methyl methacrylate). The facility is naturally non-Title V since the total VOC, total HAPs, and individual HAP emissions are below the Title V permitting thresholds of Chapter 62-213, F.A.C. without restriction.

The maximum allowable emissions of total PM, total VOCs, total HAPs, and individual HAPs from the facility will be limited to 24.0, 10.0, 10.0, and 5.0 tons per any 12 consecutive month period, respectively. All emissions of HAPs at this facility are expected to be VOCs. As indicated in the application, particulate (PM) emissions are limited to 5 % opacity.

General Process Description:

The facility manufactures kitchen countertops using DuPont Corian[R] solid surface material. Sterling Manufacturing fabricates the Corian[R] by cutting/ routing/ sanding/ buffing and seamlessly joining pieces using Corian[R] joint adhesive COR004 (Parts A and B). Denatured alcohol is used for cleaning purposes.

Emissions from the facility are primarily particulate matter. PM is generated in cutting, routing, sawing, sanding, and buffing the Corian[R] into size specific pieces. Emissions are collected via equipment shrouds connecting to vacuum hose pick-up points that are then conveyed via manifold ducting to four *Aerotech Environmental, Inc*. cartridge filter systems: two Model 336 DF Ultra-Conic Cartridge Filters and two Model 211 CC Cartridge Dust Collectors.

VOC emissions are from the general area in which countertops are worked on and finished. It is assumed that all VOC used are emitted. All HAPs generated are VOC; therefore, it is assumed that all HAPs used are emitted.

E. Application Information:

Received on: February 13, 2012
Additional Information Received: N/A
Application Complete: February 13, 2012

II. Rule Applicability

Subject to:	Y/N
Rule 62-212.300, Stationary Sources – Preconstruction Review, General Preconstruction Review Requirements, F.A.C.[1]	Y
Rule 62-212.400, Prevention of Significant Deterioration, F.A.C[2]	N
Rule 62-296.320, Stationary Sources – Emission Standards - General Pollutant Emission Limiting Standards, F.A.C[3,4]	Y
Rule 62-296.500, Reasonably Available Control Technology (RACT) – Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) Emitting Facilities[5]	N
Rule 62-296.700, Reasonably Available Control Technology (RACT) Particulate Matter[6]	N
Rule 62-204.800(8), Stds. of Performance for New Stationary Sources, F.A.C.[7] (NSPS)	N
Rule 62-204.800(10), Natl. Emission Stds. for Hazardous Air Pollutants, F.A.C.[8] (NESHAPS)	N
Chapter 62-213, Operation Permits for Major Sources of Air Pollution, F.A.C.[9]	N
Rule 62-297.310, Stationary Sources – Emissions Monitoring - General Compliance Test Requirements, F.A.C.[10]	Y

1. Not exempt from general permitting requirements
2. Facility is PSD minor source
3. Facility is a source of unconfined particulate matter emissions
4. Potential source of odors
5. Facility is not located in an ozone nonattainment or air quality maintenance area
6. Facility is not located in a PM air quality maintenance area or in the area of influence of such an area
7. Facility is not subject to Title 40 Part 60
8. Facility is minor for HAPs
9. Facility is naturally minor

10. Compliance testing is required

This project ***is*** subject to the pre-construction review requirements of Chapter 403, Florida Statutes and Chapters 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, Florida Administrative Code (F.A.C.).

This project ***is not*** subject to the Title V permitting requirements of Rule 62-213, Operation Permits for Major Sources of Air Pollution, F.A.C., since it is *naturally minor* for total PM, total VOC, total HAPs, and individual HAP [*SEE Uncontrolled Emissions in Section III of this document*].

This project ***is not*** subject to the requirements of Rule 62-212.400, Stationary Sources – Pre-construction Review - Prevention of Significant Deterioration, F.A.C., or Rule 62-212.500, Stationary Sources – Pre-construction Review - Pre-construction Review for Nonattainment Areas, F.A.C., since the source is minor by state definition and is not located in a nonattainment area.

This project ***is*** subject to the requirements of Rule 62-212.300, Stationary Sources – Pre-construction Review – General Preconstruction Review Requirements, F.A.C., since the project is not exempt from general permitting requirements.

This project ***is*** subject to the requirements of Rule 62-296.320, Stationary Sources – Emission Standards - General Pollutant Emission Limiting Standards, F.A.C., since it is a source of fugitive particulate matter emissions, and it is a potential source of odors.

This project ***is not*** subject to Rule 62-296.500, Reasonably Available Control Technology (RACT) – Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) Emitting Facilities, F.A.C., since the facility is not a VOC emitting facility in a designated ozone nonattainment or air quality maintenance area; or a NOx emitting facility in a designated area.

This project ***is not*** subject to Rule 62-296.700, Reasonably Available Control Technology (RACT) Particulate Matter, F.A.C., since the facility is not in a particulate matter (PM) air quality maintenance area or in the area of influence of such an air quality maintenance area.

This project ***is*** subject to the requirements of Rule 62-297.310, Stationary Sources – Emissions Monitoring - General Compliance Test Requirements, F.A.C. since the facility will be required to test for visible emissions.

This project ***is not*** subject to the requirements of Rule 62-204.800(8), Air Pollution Control – General Provisions – Federal Regulations Adopted by Reference – Chapter 40, Code of Federal Regulations, Part 60, Standards of Performance for New Stationary Sources, F.A.C., since the project is not an affected facility.

This project ***is not*** subject to the requirements of Rule 62-204.800(9), Air Pollution Control – General Provisions – Federal Regulations Adopted by Reference - Chapter 40, Code of Federal Regulations, Part 60, Subpart C, Emission Guidelines and Compliance Times, F.A.C., since there is not a source category.

This project ***is not*** subject to the requirements of Rule 62-204.800(10), Air Pollution Control – General Provisions – Federal Regulations Adopted by Reference - Chapter 40, Code of Federal

Regulations, Part 61, National Emission Standards for Hazardous Air Pollutants, F.A.C., since there is no source category.

This project ***is not*** subject to the requirements of Rule 62-204.800(11), Air Pollution Control – General Provisions – Federal Regulations Adopted by Reference - Chapter 40, Code of Federal Regulations, Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, F.A.C., since the project is *naturally minor* [*SEE Uncontrolled Emissions in Section III of this document*] and there is no source category.

III. Summary of Emissions

Visible Emissions: Limited by rule.

There shall be no objectionable odors.

Pollutant	Uncontrolled Emissions*		*Potential Emissions***		Allowed Emissions	
	lbs/ hr	tpy	*lbs/ hr*	*tpy*	lbs/ hr	tpy
Total VOCs	2.28	9.98	*2.28*	*4.74*	--	10
Total HAPs	1.26	5.52	*1.26*	*2.61*	--	10
Individual HAP	1.07	4.69	*1.07*	*2.23*	--	5
PM	20.25	88.7	*4.7*	*9.8*	--	24
NOx	--	--	--	--	--	--

*Uncontrolled Emissions are based on no controls and no limit on the hours of operation.
Facility emits (162 lbs PM/day)* (1 day/8 hrs) = 20.25 lb PM/ hr

If facility operates 24 hrs/ day, 365 days/ yr:

20.25 lb PM/ hr * 24 hrs/ day * 365 days/ yr = 177,390 lb PM/ yr *or*

177,390 lb PM/ yr * 1 ton/ 2,000 lbs = 88.7 tpy PM

Facility emits (4,736.97 lbs VOC/ yr)* (1 yr/ 52 wks)(1 wk/ 5 days)(1 day/ 8 hrs) = 2.28 lb VOC/ hr

If facility operates 24 hrs/ day, 365 days/ yr:

2.28 lb VOC/ hr * 24 hrs/ day * 365 days/ yr = 19,972.8 lb VOC/ yr *or*

19,972.8 lb VOC/ yr * 1 ton/ 2,000 lbs = 9.98 tpy VOC

Similarly,

1.26 lb total HAPs/ hr * 24 hrs/ day * 365 days/ yr = 11,037.6 lb total HAPs/ yr *or*

11,037.6 lb total HAPs/ yr * 1 ton/ 2,000 lbs = 5.52 tpy total HAPs

And,

1.07 lb HAP/ hr * 24 hrs/ day * 365 days/ yr = 9,373.2 lb HAP/ yr *or*

9,373.2 lb HAP/ yr * 1 ton/ 2,000 lbs = 4.69 tpy HAP

**Potential Emissions are based on the maximum capacity of the facility to emit a pollutant under its physical and operational design, which includes air pollution control equipment and restrictions on the hours of operation.

IV. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapter 62-296, 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 62-297, F.A.C.

V. Proposed Agency Action

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, Sarasota County Parks, Recreation and Natural Resources [SCNR] hereby gives notice of its intent to issue a permit to construct and operate the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).