



TECHNICAL EVALUATION

APPLICANT

Vistakon, Division of Johnson & Johnson Vision Care, Inc.
7500 Centurion Parkway
Jacksonville, Florida 32256

Facility ID No. 0310535

PROJECT

Project No. 0310535-016-AC
Permit Determination

COUNTY

Duval

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Permitting Program
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

January 26, 2015

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1. GENERAL PROJECT INFORMATION

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 chapters:

Table 1 - Applicable Rules from the F.A.C.

Chapter	Description
62-4	Permits
62-204	Air Pollution Control – General Provisions
62-210	Stationary Sources of Air Pollution – General Requirements
62-212	Stationary Sources – Preconstruction Review
62-296	Stationary Sources – Emission Standards
62-297	Stationary Sources – Emissions Monitoring

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 activities. 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.

Federal regulations adopted by reference are given in Rule 62-204.800, F.A.C. State regulations approved by EPA are given in 40 CFR 52, Subpart K – Florida, also known as the State Implementation Plan (SIP) for Florida.

Facility Process Description

The existing facility consists of numerous contact lens manufacturing and research and development (R & D) lines, five natural gas fired steam boilers, each with a maximum of 8.4×10^6 BTU per hour input, and three 8,000 gallon isopropyl alcohol (IPA) or lower vapor pressure solvents or other lower vapor pressure material storage tanks. The manufacturing lines include resin injection molding for contact lens production, hydration, packaging, printing operations and waste plastic collection and processing systems. Research and development activities are performed on site. There are three emergency reciprocating internal combustion engines (RICE) located at the facility along with a number of insignificant activities.

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 210, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Processing Schedule

1/22/15 Department received the Permit Determination Request

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2. PROJECT REVIEW

The City of Jacksonville, Neighborhoods Department, Environmental Quality Division determined that an air pollution source permit was not required for the installation of the 4 IPA Tanks and 3 PG tanks. These emissions units are listed in Appendix I – List of Insignificant Units and/or Activities in the current Title V Operation Permit, No. 0310535-012-AV.

On January 22, 2015, the Department received a letter via e-mail requesting an air permit determination for the replacement of the six existing storage tanks at the facility with six new storage tanks of greater capacity and the addition of seven new storage tanks. Based on the information submitted by the facility the expected air emissions from the proposed installation are less than 5 tons per year of any regulated air pollutant and shall be in accordance with Rule 62-4.040, F.A.C.

This project proposes the following changes.

Existing Tank	Capacity (gal)	New Tank	Capacity (gal)	Tank Type
IPA Tank 1	8000	<u>IPA Bulk Supply Tank 1</u>	<u>12,000</u>	<u>Horizontal</u>
IPA Tank 2	750	<u>IPA Bulk Supply Tank 2</u>	<u>12,000</u>	
IPA Spent Tank 1	8000	<u>IPA Bulk Spent Tank 1</u>	<u>12,000</u>	
PG Tank 1	8000	<u>IPA Bulk Spent Tank 2</u>	<u>12,000</u>	
PG Tank 2	750	<u>PG Bulk Supply Tank 1</u>	<u>20,000</u>	
PG Spent Tank 1	8000	<u>PG Bulk Supply Tank 2</u>	<u>20,000</u>	
		<u>PG Bulk Spent Tank 1</u>	<u>20,000</u>	
		<u>PG Bulk Spent Tank 2</u>	<u>20,000</u>	<u>Vertical</u>
		<u>Spill Containment</u>	<u>22,000</u>	
		<u>Loop 1 Day Tank 1</u>	<u>2,600</u>	
		<u>Loop 2 Day Tank 1</u>	<u>2,600</u>	
		<u>Loop 3 Day Tank 1</u>	<u>2,600</u>	
		<u>Loop 4 Day Tank 1</u>	<u>2,600</u>	
Total	33,500		<u>160,400</u>	

Potential Emissions Estimation

Base on the information submitted by the applicant estimated emissions from the installation of the proposed storage tanks are based on EPA’s TANKS Emissions Estimation Software (Version 4.09D)
 All proposed installation will be equipped with carbon filters for the control of VOC emissions. The bi-directional carbon filters were conservatively assumed to have an 80% efficiency.

For each of the IPA Bulk Supply and Spent Tanks the estimated emissions are 706.6 lbs/yr uncontrolled and 141.3 lbs/yr with the carbon filters. For each PG Bulk Supply and Spent Tanks the estimated emissions are 3.2 lbs/yr. uncontrolled and 0.6 lbs/yr with the carbon filters and for each IPA Day Tank the estimated emissions are 299.0 lbs/yr and 59.8 lbs/yr with carbon filters.

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Estimated VOC Emissions from all Tanks

Emissions Source	VOC (lbs/yr) Controlled	VOC (TPY) Controlled
Tanks (ALL)	1695.6	0.8

Note: Potential emissions determined using 8,760 hours of operation per year

Section III. Emission Units and Conditions, Condition 2. of Title V Operation Permit No. 0310535-012-AV limits VOC emissions to 249.9 tons per year (calendar basis) at the request of the applicant to maintain the facility status as minor for Prevention of Significant Deterioration (PSD) purposes.

Based on information submitted by the facility the reported annual emissions from the existing tanks is approximately 1200 pounds (0.6) tons/yr.

Rule Applicability

40 CFR 60 Subpart Kb - Volatile Organic Liquid Storage Vessels regulates storage vessels with a capacity greater than 75000 m³ used to store volatile organic liquids for which construction, reconstruction or modification is commenced after July 23, 1984.

Pursuant to §60.110b (b) NSPS Subpart Kb tanks may be exempt based on size and the maximum true vapor pressure of the material stored.

Based on the submitted information the small tanks (Day and IPA tanks) with capacities of 2,600 and 12,000 gallons each are not subject to the subpart based on size threshold. The proposed new large PG storage tanks with vapor pressure at a maximum temperature of 114°F is 0.134 kPa. Based on the submitted information, it appears that the large new proposed tanks at the facility meet the exemption requirement for storage vessels with a capacity greater than or equal to 75000 m³ but less than 151,000 m³ storing a liquid with a maximum true vapor pressure of less than 15.0 KPa.

3. DETERMINATION

The Department makes a determination that the proposed project activity, as submitted, meets the Exemption of Rule 62-040, F.A.C. Therefore, Pursuant to Rule 62-4.040(1)(b) of the Florida Administrative Code (F.A.C.) the proposed activity will not emit air pollutants" ... in sufficient quantity, with respect to its character, quality, or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified" therefore the project is exempt from the requirement to obtain an air construction permit. Yasmin K. Enriquez is the project engineer responsible for reviewing the submittal and preparing the Exemption from the Requirement to Obtain an Air Construction Permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Northeast District Office, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256, Phone: 904/256-1700.