

**STATEMENT OF BASIS:
COLORMASTERS, LLC (Facility #2)
Albertville, Alabama
Facility No. 711-0041**

On August 11, 2016, Colormasters, LLC (Facility #2) submitted a revised third Major Source Operating Permit (MSOP) Title V renewal application. Their initial MSOP was issued on November 15, 2001, and subsequently their first and second renewals were issued on November 2, 2006, and November 2, 2011, respectively. Colormasters has had several equipment modifications and is currently operating with two additional Air Permits X005 and X006 issued on August 20, 2015.

OPERATION:

Incoming polyethylene plastic is printed on flexographic printing presses with associated electric drying ovens. Inks and solvents are blended in a mixing room prior to being conveyed to the presses. This facility's SIC Code is 2673 for the coating and lamination of plastic bags. Colormasters operates three shifts seven days a week for a total of 8,760 hours a year.

The current MSOP consist of Units 003 and 004:

- (1) **Unit 003 – (Line # 007)** Two (2) Flexographic Printing Presses #7 (eight-color) and #8 (ten-color) with Two (2) Drying Ovens – two (2) 0.80 MMBtu/hr natural gas fired burners
- (2) **Unit 004 - (Line # 008)** One (1) Flexographic Printing Press #9 (ten-color printer) with One (1) Drying Oven – two (2) 0.08 MMBtu/hr natural gas fired burners

Their current Air Permits are X005 and X006:

- (1) **X005 - Line # 009** – One (1) Flexographic Printing Press with Associated Equipment: [Press #7 (eight-color) with One (1) Drying Oven – two (2) 0.80 MMBtu/hr natural gas fire burners]
- (2) **X006 - Line # 010** – Two (2) Flexographic Printing Presses with Associated Equipment, and a Regenerative Thermal Oxidize (RTO): [Presses #8 (ten-color) and #9 (ten-color) with Two (2) Drying Ovens – two (2) 0.80 MMBtu/hr natural gas fired burners, and a RTO – 4.0 MMBtu/hr natural gas fired, with 95% destruction and removal efficiency (DRE)]

The current Air Permits reassign the MSOP's Units 003 & 004 printing presses into Line #009, and Line #010 with a RTO, respectively. The two laminators are considered insignificant and trivial (IT) activities based on the Title V program requirements. A solvent reclamation system is being used to recover solvents from the cleanup operations and is also considered an IT activity.

The Proposed Renewal MSOP:

- (1) **Unit 005 – (Line # 009)** One (1) Flexographic Printing Press #7 (eight-color printer) with One (1) Drying Oven – two (2) 0.08 MMBtu/hr natural gas fired burners
- (2) **Unit 006 – (Line # 010)** Two (2) Flexographic Printing Presses #8 (ten-color) and #9 (ten-color) with Two (2) Drying Ovens – two (2) 0.80 MMBtu/hr natural gas fired burners, vented to a RTO

Assembly and Cutting:

The printed and non-printed plastic is assembled into bags and cut at one of twelve machines, where a maximum cutting temperature of 950°F is reached. Once assembled, the bags are boxed and shipped. Some of the printed bags are sent out uncut.

EMISSIONS:

Inks and reducing solvents used are blended in a mixing room prior to being conveyed to the presses. The emissions would be based on their inks, adhesives and solvents usage. Their VOC and HAP emissions are determined at the end of each month and submitted quarterly, on a rolling twelve-month basis. The emissions from Press #7 are vented to the atmosphere. The emissions from Presses #8 and #9 are vented to the RTO. The clean-up solvent is reclaimed on site and the still bottoms from the reclamation unit are transported off site as a hazardous waste.

Colormasters has requested to maintain their current MSOP’s VOC and HAP emissions limits, see table below.

Proposed Renewal MSOP Emission Limits Table

Unit No.	Line No.	Flexographic Printing Press No.	VOC (tpy)	HAP/HAPs (tpy) Facility Wide
<i>005</i>	<i>009</i>	<i>#7 (eight-color press)</i>	<i>245</i>	<i>9.5 / 24.5</i>
<i>006</i>	<i>010</i>	<i>#8 (ten-color press) #9 (ten color press)with RTO-95% DRE</i>	<i>245</i>	<i>9.5 / 24.5</i>

The MSOP’s Units 005 and 006 would have a VOC emissions limit of 245 tpy each. The facility wide HAP emissions would remain at to 9.5 tons for any single HAP and 24.5 tons for any combination of HAPs emissions during any consecutive 12-month period. Colormasters’ operation is considered a major Title V source.

Greenhouse Gases (GHG) Applicability – The GHG emissions from the facility’s natural gas fired ovens (4.8 MMBtu/hr – Total) are 2,522.88 and 2,538.24 tons CO₂ and CO_{2e}, respectively.

No other criteria pollutants are emitted in sufficient quantities, actually or potentially, to exceed the Title V permitting source threshold of 100 tons per year.

REQUIREMENTS:

Colormasters is a major source for VOC emissions, and has requested emission limits to avoid a PSD review. Units 005 and 006 would each have a 245 tpy VOC emissions limit. Colormasters has a facility wide HAP/HAPs emissions limitations of 9.5/24.5 tpy. Colormasters' potential single and combination HAP emissions are below the threshold value of 10/25 tons per year, thus this facility is not subject to NESHAP - 40 CFR Part 63, Subpart KK, the Standards for the Printing and Publishing Industries. There are no Control Technology Guidelines (CTG) or New Source Performance Standard (NSPS) regulations applicable to this facility.

Monitoring of Emissions

The VOC and HAP emissions are determined from material usage and these records would be submitted quarterly to this Department for review. There are no applicable CAM requirements for Colormasters' operations. Their existing monitoring is sufficient to demonstrate compliance and no changes are necessary.

Permitting Fees

Title V major sources are subject to operating permit fees which charge the facility a yearly amount based on the actual emission rate of pollutants for the previous year.

Affected States Notification

Notification of the proposal of this major source operating permit will be sent to all affected states bordering Alabama.

RECOMMENDATION:

Based on the above analysis, I recommend Colormasters' existing MSOP and Air Permits be combined under a single MSOP pending the public notice and EPA review. Colormasters' renewal Major Source Operating Permit would consist of Units 005 and 006 as Line # 009 and Line # 010, respectively.

Clarence Fairer III
Chemical Branch
Air Division

September 1, 2016
Date

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