

STATEMENT OF BASIS (SOB)
COLORMASTERS, INC. (Medlock Road Facility)
Albertville, Alabama
Facility No. 711-0066

Colormasters is currently operating with a Major Source Operating Permit (MSOP) that consists of Units 006 and 007, and an Air Permit that consists of Unit X008. On October 5, 2021, Colormasters submitted a MSOP application to incorporate Air Permit X008 into their current MSOP.

There are no current or ongoing enforcement actions against Colormasters necessitating additional requirements to achieve compliance with permit conditions. Geneva County is currently listed in attainment with all National Ambient Air Quality Standards (NAAQS).

OPERATIONS:

Colormasters' SIC Code is 2673 for the flexographic printing of polyethylene bags, and their NAICS Code is 32611 for the manufacturing of bags, plastics film and single wall or multi-wall. This facility operates approximately 8,760 hours a year. Incoming polyethylene plastic is printed on flexographic printing presses with associated natural gas fired drying ovens. Currently, the MSOP consists of four flexographic printing presses and their emissions are being controlled by two regenerative thermal oxidizers (RTO-1 and RTO-2).

MSOP Units 006 and 007:

- (a) **Unit 006 – Line #006:** Two (2) Flexographic printing presses with associated equipment, and Regenerative Thermal Oxidizer (RTO) - [**Press #1** (ten-color) and **Press #2** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr natural gas fired burners, and **RTO-2** – 4.0 MMBtu/hr natural gas fired]
- (b) **Unit 007 – Line #007:** Two (2) Flexographic print presses with associated equipment and Regenerative Thermal Oxidizer (RTO) - [**Press #3** (ten-color) and **Press #4** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr gas fired burners, and **RTO-1** – 4.0 MMBtu/hr natural gas fired]

AIR PERMIT X008:

- (c) **Unit X008 – Line #008:** Two (2) Flexographic print presses with associated equipment and Regenerative Thermal Oxidizer (RTO) - [**Press #5** (ten-color) and **Press #6** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr gas fired burners, and **RTO-3** – 4.0 MMBtu/hr natural gas fired]

EMISSIONS:

MSOP: Units 006 and 007 are each permitted to emit 245 tons of VOC emissions per rolling 12-month period utilizing the respective RTOs. The current RTOs reduce the concentration of gaseous phase hydrocarbons measured at the inlet of the RTOs, as compared to the concentration of gaseous phase hydrocarbons measured at the outlet.

Air Permit X008: VOC emissions from Unit 008 are limited to 39.0 tons during any consecutive rolling 12-month period to avoid being subject to the PSD requirements.

The three RTOs have the same designed and manufacturer guaranteed 95.0% destruction and removal efficiency (DRE). Each RTO must have an audible alarm or easily detectable signal which will provide a warning when the combustion chamber temperature decreases to less than the established minimum operational (3-hour rolling average) temperature. If the 3-hour rolling average falls below the minimum operational temperature for more than 15 minutes, the process(es) will automatically shut down or the facility will provide ADEM a statement that the process(es) shutdown was impractical. This failure to shutdown may be viewed as an exceedance by the Department.

RTOs EMISSIONS:

(RTO-1) Emissions with 95% DRE: Unit #007 – Presses # 3 & # 4

Pollutants	Uncontrolled - lbs/hr (tpy)	Controlled - lbs/hr (tpy)
VOC	164.34 (719.8)	8.22 (36.0)

(RTO-2) Emissions with 95% DRE: Unit #006 – Presses # 1 & # 2

Pollutants	Uncontrolled - lbs/hr (tpy)	Controlled - lbs/hr (tpy)
VOC	164.34 (719.8)	8.22 (36.0)

(RTO-3) Emissions with 95% DRE: Unit X008 – Presses #5 & #6

Pollutants	Uncontrolled - lbs/hr (tpy)	Controlled - lbs/hr (tpy)
VOC	158.82 (700.0)	7.99 (35.0)

The above emissions are based on 8,760 hours of operations.

The estimated RTOs' emissions are below the PSD major source thresholds; therefore, a PSD review would not be necessary at this time. Colormasters has requested that their facility-wide HAP emissions limitations remain the same at 9.5 tons for any single HAP and 24.5 tons for any combination of HAPs.

No other criteria pollutants (e.g., NOx nor CO) are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold of 100 tons per year.

REQUIREMENTS:

This facility is located in an attainment area for all pollutants. 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 40 CFR 63 MACT Subpart KK, *Standards for the Printing and Publishing Industries*. Currently, 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 will be determined from material usage and submitted to this Department on a quarterly basis. Their existing monitoring is sufficient to demonstrate compliance with all applicable permit limits and regulations; therefore, no changes are necessary. Currently, there are no applicable compliance assurance monitoring (CAM) requirements for this facility's operations.

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.

Environmental Justice

ADEM utilized EPA's EJSCREEN screening tool to help identify areas that may warrant additional consideration, analysis, or outreach (see attached EJSCREEN Report).

RECOMMENDATION:

The facility has requested to incorporate Air Permit X008 into their current MSOP. Based on the above analysis, I recommend that Colormasters be issued a new MSOP with Air Permit X008 incorporated, pending the Public e-Notice period and EPA review.

The proposed MSOP would consist of the following:

Unit 006 – Lines #006: Two (2) Flexographic printing presses with associated equipment, and Regenerative Thermal Oxidizer (RTO) - [**Press #1** (ten-color) and **Press #2** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr natural gas fired burners, and **RTO-2** – 4.0 MMBtu/hr natural gas fired]

Unit 007 – Line #007: Two (2) Flexographic print presses with associated equipment and Regenerative Thermal Oxidizer (RTO) - [**Press #3** (ten-color) and **Press #4** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr gas fired burners, and **RTO-1** – 4.0 MMBtu/hr natural gas fired]

Unit 008 – Line #008: Two (2) Flexographic print presses with associated equipment and Regenerative Thermal Oxidizer (RTO) - [**Press #5** (ten-color) and **Press #6** (ten-color), with Two (2) Ovens – two (2) 0.80 MMBtu/hr gas fired burners, and **RTO-3** – 4.0 MMBtu/hr natural gas fired]

Clarence Fairer III
Chemical Branch
Air Division

October 14, 2021
Date

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