800 Morrison Road
Gahanna, OH 43230
P (614) 863-3113
F (614) 863-0475

August 16, 2024

Kentucky Division for Air Quality
Permit Support Section
300 Sower Blvd., 2nd Floor
Frankfort, KY 40601

RE: Marzetti Manufacturing Company,
1000 Top Quality Drive, Horse Cave, Kentucky
Conditional Major Permit Renewal Application
Source I.D. #21-099-00035
Agency Interest # 71651
Permit I.D. F-19-030 (R2)

To Whom It May Concern:

Please find enclosed the Conditional Major Permit Renewal Application for the Marzetti Manufacturing Company. The permit is set to expire February 2nd, 2025 therefore Marzetti Manufacturing Company is submitting the timely permit renewal application, given an approved extension by Troy Tabor (Kentucky Division for Air Quality, Environmental Control Supervisor) to submit by August 16th, 2024. The permit renewal application incorporates all changes made since the most recent significant revision.

In accordance with Kentucky Regulation 401 KAR 52:030 Sections 4 and 12, we are submitting the required DEP7007 application forms and accompanying information for the Renewal.

If you have questions or comments regarding this submittal or the enclosed information, please feel free to contact Andrew Wehr (614) 671-6523 or myself (614) 256-0363.

Thank you,

Lisa Schweder

Lisa Schweder, P.E.
Staff Environmental Engineer
Terracon Consultants, Inc.

David C. Reynolds, P.E.
Authorized Project Reviewer
Terracon Consultants, Inc.

Marzetti Manufacturing Company Representative:

Patrick S. Mullen

Patrick S. Mullen
Sr Dir Plant Operations

PERMIT RENEWAL APPLICATION

FOR

CONDITIONAL MAJOR PERMIT F-14-030 R3

(Per 401 KAR 52:030 Sections 4 and 12)

FOR

T. MARZETTI COMPANY

HORSE CAVE, KENTUCKY

PREPARED FOR:

T. MARZETTI COMPANY

1000 TOP QUALITY DRIVE

HORSE CAVE, KENTUCKY 42749

PREPARED BY:

TERRACON CONSULTANTS, INC.

72 POINTE CIRCLE

GREENVILLE, SC 29607

AUGUST 2024

Introduction

Marzetti Manufacturing Company (Marzetti), located in Horse Cave, Kentucky, is currently operating a food product manufacturing facility. The facility operates under SIC code 2035, pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings, and under Air Permit Number F-19-030 R2. The permit is set to expire February 2nd, 2025, therefore Marzetti is submitting this permit renewal application incorporating all changes made since the most recent significant revision. No changes to currently permitted sources have occurred since the most recent significant revision, nor will any additional sources be added during this renewal period without revision.

Changes to the permit since the most recent source wide permit action:

- Calculations for the potential-to-emit (PTE) values have been updated to more accurately model emissions, with no change to operation of the facility, including:
    - Removal of the Rotoclone control device from the Volatile Organic Compounds (VOC) emission source calculations associated with alcohol use during production to reflect the Rotoclone controlling particulate matter, not VOC's. Refer to DEP7007N for calculations.
    - Change of category for the VOC emissions from controlled to uncontrolled to more accurately reflect the site's conditions. Refer to DEP7007N for calculations.
    - Change of Emissions Unit 10, Ink Jet and Spray Stencil, from emitting through a stack to emitting as a fugitive source. The Emissions Unit vents to the interior of the facility. Refer to DEP7007N for calculations.

DEP7007 PERMIT APPLICATION FORMS

DEP7007AI

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007AI

Administrative Information

___ Section AI.1: Source Information

___ Section AI.2: Applicant Information

___ Section AI.3: Owner Information

___ Section AI.4: Type of Application

___ Section AI.5: Other Required Information

___ Section AI.6: Signature Block

___ Section AI.7: Notes, Comments, and Explanations

Additional Documentation

___ Additional Documentation attached

Source Name: **Marzetti Manufacturing Company**

KY EIS (AFS) #: **21-** **099-00035**

Permit #: **F-19-030 R3**

Agency Interest (AI) ID: **71651**

Date: **8/16/2024**

Section AI.1: Source Information

Physical Location Address:	**Street:**	1000 Top Quality Drive				
	City:	Horse Cave	**County:**	Hart	**Zip Code:**	42749
Mailing Address:	**Street or P.O. Box:**	1000 Top Quality Drive				
	City:	Horse Cave	**State:**	Hart	**Zip Code:**	42749

Standard Coordinates for Source Physical Location

Longitude: 37.156472 (decimal degrees) **Latitude:** -85.917528 (decimal degrees)

Primary (NAICS) Category: Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing **Primary NAICS #:** 311941

Classification (SIC) Category: Pickled Fruits and Vegetables, Vegetable Sauces and Seasonings, and Salad Dressings **Primary SIC #:** 2035

Briefly discuss the type of business conducted at this site: The facility on-site activities include dips and food preparation operations with assocaited process equipment.

Description of Area Surrounding Source: ☐ Rural Area ☐ Industrial Park ☐ Residential Area ☐ Urban Area ☑ Industrial Area ☐ Commercial Area

Is any part of the source located on federal land? ☐ Yes ☑ No

Number of Employees: 650

Approximate distance to nearest residence or commercial property: *100 feet, adjacent residence to northwest*

Property Area: **67.4 acres**

Is this source portable? ☐ Yes ☑ No

What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?

NPDES/KPDES:	☑ Currently Hold	☐ Need	☐ N/A
Solid Waste:	☐ Currently Hold	☐ Need	☑ N/A
RCRA:	☐ Currently Hold	☐ Need	☑ N/A
UST:	☐ Currently Hold	☐ Need	☑ N/A

Type of Regulated Waste Activity: ☐ Mixed Waste Generator ☐ Generator ☐ Recycler ☐ Other: _____

☐ U.S. Importer of Hazardous Waste ☐ Transporter ☐ Treatment/Storage/Disposal Facility ☑ N/A

Section AI.2: Applicant Information

Applicant Name: Marzetti Manufacturing Company

Title: (if individual)

Mailing Address:
Street or P.O. Box: 1000 Top Quality Drive
City: Horse Cave **State:** Kentucky **Zip Code:** 42749

Email: (if individual)

Phone:

Technical Contact

Name: Daivd Jackson

Title: EHS Manager

Mailing Address:
Street or P.O. Box: 1000 Top Quality Drive
City: Horse Cave **State:** Kentucky **Zip Code:** 42749

Email: david.jackson@marzetti.com

Phone:

Air Permit Contact for Source

Name: Daivd Jackson

Title: EHS Manager

Mailing Address:
Street or P.O. Box: 1000 Top Quality Drive
City: Horse Cave **State:** Kentucky **Zip Code:** 42749

Email: david.jackson@marzetti.com

Phone:

Section AI.3: Owner Information

☑ **Owner same as applicant**

Name:

Title:

Mailing Address: **Street or P.O. Box:**

City: **State:** **Zip Code:**

Email:

Phone:

List names of owners and officers of the company who have an interest in the company of 5% or more.

Name	Position

Section AI.4: Type of Application

Current Status: ☐ Title V ☑ Conditional Major ☐ State-Origin ☐ General Permit ☐ Registration ☐ None

Requested Action: *(check all that apply)*

☐ Name Change	☐ Initial Registration	☐ Significant Revision	☐ Administrative Permit Amendment
☑ Renewal Permit	☐ Revised Registration	☐ Minor Revision	☐ Initial Source-wide OperatingPermit
☐ 502(b)(10)Change	☐ Extension Request	☐ Addition of New Facility	☐ Portable Plant Relocation Notice
☐ Revision	☐ Off Permit Change	☐ Landfill Alternate Compliance Submittal	☐ Modification of Existing Facilities
☐ Ownership Change	☐ Closure		

Requested Status: ☐ Title V ☑ Conditional Major ☐ State-Origin ☐ PSD ☐ NSR ☐ Other: _____

Is the source requesting a limitation of potential emissions? ☐ Yes ☐ No

Pollutant:	Requested Limit:	Pollutant:	Requested Limit:
☐ Particulate Matter		☐ Single HAP	
☑ Volatile Organic Compounds (VOC)	90 tpy	☐ Combined HAPs	
☐ Carbon Monoxide		☐ Air Toxics (40 CFR 68, Subpart F)	
☐ Nitrogen Oxides		☐ Carbon Dioxide	
☐ Sulfur Dioxide		☐ Greenhouse Gases (GHG)	
☐ Lead		☐ Other	

For New Construction:

Proposed Start Date of Construction: *(MM/YYYY)* _____

Proposed Operation Start-Up Date: *(MM/YYYY)* _____

For Modifications:

Proposed Start Date of Modification: *(MM/YYYY)* _____

Proposed Operation Start-Up Date: *(MM/YYYY)* _____

Applicant is seeking coverage under a permit shield. ☐ **Yes** ☑ **No**

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.

Section AI.5 Other Required Information

Indicate the documents attached as part of this application:

- ☐ DEP7007A Indirect Heat Exchangers and Turbines
- ☐ DEP7007B Manufacturing or Processing Operations
- ☐ DEP7007C Incinerators and Waste Burners
- ☐ DEP7007F Episode Standby Plan
- ☐ DEP7007J Volatile Liquid Storage
- ☐ DEP7007K Surface Coating or Printing Operations
- ☐ DEP7007L Mineral Processes
- ☐ DEP7007M Metal Cleaning Degreasers
- ☑ DEP7007N Source Emissions Profile
- ☐ DEP7007P Perchloroethylene Dry Cleaning Systems
- ☐ DEP7007R Emission Offset Credit
- ☐ DEP7007S Service Stations
- ☐ DEP7007T Metal Plating and Surface Treatment Operations
- ☐ DEP7007V Applicable Requirements and Compliance Activities
- ☐ DEP7007Y Good Engineering Practice and Stack Height Determination
- ☐ DEP7007AA Compliance Schedule for Non-complying Emission Units
- ☐ DEP7007BB Certified Progress Report
- ☐ DEP7007CC Compliance Certification
- ☐ DEP7007DD Insignificant Activities
- ☐ DEP7007EE Internal Combustion Engines
- ☐ DEP7007FF Secondary Aluminum Processing
- ☑ DEP7007GG Control Equipment
- ☐ DEP7007HH Haul Roads
- ☐ Confidentiality Claim
- ☐ Ownership Change Form
- ☐ Secretary of State Certificate
- ☐ Flowcharts or diagrams depicting process
- ☐ Digital Line Graphs (DLG) files of buldings, roads, etc.
- ☐ Site Map
- ☐ Map or drawing depicting location of facility
- ☐ Safety Data Sheet (SDS)
- ☐ Emergency Response Plan
- ☐ Other: _____

Section AI.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

Patrick S. Mullen	08/16/2024
Authorized Signature	**Date**
Patrick S. Mullen	Sr Dir Plant Operations
Type or Printed Name of Signatory	**Title of Signatory**

*Responsible official as defined by 401 KAR 52:001.

Section AI.7: Notes, Comments, and Explanations

DEP7007 PERMIT APPLICATION FORMS

DEP7007GG

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007GG

Control Equipment

Additional Documentation

___ Complete Sections GG.1 through GG.12, as applicable

___ Attach manufacturer's specifications for each control device

___ Complete DEP7007AI

Source Name: **Marzetti Manufacturing Company**

KY EIS (AFS) #: **21-** **099-0003**

Permit #: **F-19-030 R3**

Agency Interest (AI) ID: **71651**

Date:

Section GG.1: General Information - Control Equipment

Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/ Serial #	Date Installed	Inlet Gas Stream Data For All Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers Only			Equipment Operational Data For All Control Devices		
						Temperature (°F)	Flowrate (scfm @ 68°F)	Average Particle Diameter (μm)	Particle Density (lb/ft^3) or Specific Gravity	Gas Density (lb/ft^3)	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range ($in. H_2O$)	Pollutants Collected/ Controlled	Pollutant Removal (%)
09-01	Rotoclone 1		AAF International	1655182-004	Prior to 2019	Ambient					N/A	N/A	N/A		PM	99%
21-01	Rotoclone 1		AAF International	1655182-004	Prior to 2019	Ambient					N/A	N/A	N/A		PM	99%
08	Rotoclone 2		AAF International	131896-014	Prior to 2019	Ambient					N/A	N/A	N/A		PM	99%

Section GG.2: Flare Source Information

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	Type of Flare (e.g. steam-assisted, air-assisted, nonassisted)	Process Gas Flowrate *(acfm)*	Net Heating Value of Stream(s) (Btu/scf)	Removal Efficiency *(%)*	Flare Rated Capacity *(MMBtu/hr)*
N/A						

Section GG.3: Cyclone

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Cyclone	Identify Number of Cyclones: Single or Multiple	Identify Type: High-Efficiency, Conventional, or High-Throughput	Inlet Height *(ft)*	Inlet Width *(ft)*	Bottom Cone Height *(ft)*	Body Height *(ft)*	Body Diameter *(ft)*	Dust Outlet Tube Diameter *(ft)*	Gas Outlet Tube Diameter *(ft)*	Vortex Finder Height *(ft)*
N/A											

Section GG.4: Electrostatic Precipitator (ESP)

Control Device ID #	Identify all Emission Units and Control Devices that Feed to ESP	Identify Type: Dry negative corona, Wet negative corona or Wet positive corona	Number of Stages	Number of Plates per Stage	Plate Spacing *(in)*	ESP Total Width *(ft)*	ESP Total Height *(ft)*	Collection Plate Height *(ft)*	Length of Collection Plate *(ft)*	Particle Migration (Drift) Velocity *(specify units)*	Particle Resistivity *(specify units)*	Primary and Secondary Voltage Across Plates *(volts)*	Primary and Secondary Current *(amperes)*
N/A													

Section GG.5: Scrubber

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Scrubber	Identify Type of Scrubber: Venturi, Packed Bed, Spray Tower, or Other (specify)	For Venturi Scrubbers:	For Packed Bed Scrubbers:		For Spray Towers:		Identify Type of Flow: Concurrent, Countercurrent, or Crossflow	Length in Direction of Gas Flow *(ft)*	Cross-Sectional Area *(ft^2)*	Venturi Throat Velocity *(ft/s)*	Mist Eliminator			Scrubbing Liquid			
			Identify Throat Type: Fixed or Adjustable	Identify Packing Type	Packing Height *(in)*	Number of Nozzles	Nozzle Pressure *(psig)*					Identify Type: Mesh or Vane	Cross-Sectional Area *(ft^2)*	Pressure Drop *(in. H_2O)*	Chemical Composition	Flowrate *(gal/min)*	Fresh Liquid Makeup Rate *(gal/min)*	Describe Disposal Method of Scrubber Effluent
N/A																		

Section GG.6: Filter

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Filter	Identify Type of Filter Unit: Baghouse, Cartridge Collector, or Other (specify)	Identify Type of Filtering Material: Fabric, Paper, Synthetic, or Other (specify)	Total Filter Area *(ft^2)*	Effective Air-to-Filter Ratio *($acfm/ft^2$)*	Continuous Monitoring Instrumentation (e.g. COMS, BLDS, none)	Additional Materials Introduced into the Control System (e.g. lime, carbon)		Identify Cleaning Method: Shaker, Pulse Air, Reverse Air, Pulse Jet, or Other (specify)	Identify Gas Cooling Method: Ductwork, Heat Exchanger, Bleed-in Air, Water Spray, or Other (specify)	For Ductwork:		For Bleed-in Air:	For Water Spray:
							Material	Injection Rate *(lb/hr)*			Length *(ft)*	Diameter *(ft)*	Flowrate *(scfm @ 68°F)*	Flowrate *(gal/min)*
N/A														

Section GG.7: Afterburner/Incinerator/Oxidizer

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Afterburner/Incinerator/ Oxidizer	Identify Type: Afterburner, Incinerator, Oxidizer, or Other (specify)	Number of Burners	Burner Rating *(BTU/hr)*	Dimensions of Combustion Chamber *(specify units)*	Residence Time *(sec)*	Combustion Chamber Temperature *(° F)*	Type of Catalyst (if applicable)	Type of Heat Exchanger (if applicable)	Auxiliary Fuel							Composition and Quantities of Combusted Waste
										Identify Fuel Type	Higher Heating Value *(MMBtu/scf)*	Hourly Fuel Usage *(scf/hr)*	% Sulfur (Maximum)	% Sulfur (Average)	% Ash (Maximum)	% Ash (Average)	
N/A																	

Section GG.8: Adsorber

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Adsorber	Identify Adsorbate	Identify Adsorbent: Activated carbon, Activated alumina, Silica Gel, Synthetic Polymers, Zeolite, or Other (specify)	Dimensions of Each Bed				Type of Regeneration: Replacement, Steam, or Other (specify)	Regeneration Time *(minutes)*	Method of Regeneration: Alternate Use of Beds, Source Shutdown, or Other (specify)	Time On-line Before Regeneration *(minutes)*
				Thickness in Direction of Gas Flow *(in)*	Cross-Sectional Area *(in^2)*	Weight of Adsorbent per Bed *(lb)*	Number of Beds				
N/A											

Section GG.9: Condenser

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Condenser	Identify Type of Condenser: Spray Tower, Jet Ejector, Barometric, Single-Pass Shell-and-Tube, or Multi-Pass Shell-and-Tube (if multi-pass, indicate number of passes)	Identify Type of Coolant: Water, Brine, Liquid Nitrogen, CFC/HFC, or Other (specify)	Coolant Temperature		Coolant Liquid Flowrate *(gpm)*	Coolant Gas Flowrate *(scfm @ 68 °F)*	Condensing Surface Area *(specify units)*	Outlet Gas Temperature *(°F)*	Outlet Gas Composition
				Inlet *(°F)*	Outlet *(°F)*					
N/A										

Section GG.10: Selective Catalytic Reduction (SCR) / Selective Non-catalytic Reduction (SNCR)

Control Device ID #	Identify all Emission Units and Control Devices that Feed to SCR/SNCR	Type (SCR/SNCR)	Gas Composition	Injection Grid Design (e.g. honeycomb)	Design Temperature Range		Reagent			Maximum Design Ammonia Slip *(ppm)*	SCR Only			
											Catalyst			
					Min *(°F)*	Max *(°F)*	Type	Injection Rate			Composition	Volume *(ft^3)*	Weight *(lb)*	Replacement Schedule
								Min *(lb/hr)*	Max *(lb/hr)*					
N/A														

Section GG.11: Other Control Equipment

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Control Equipment	**Type of Control Equipment** (provide description and a diagram with dimensions)
Rotoclone 1	EU 09 (09-01 and 09-02) and EU 21 (21-01 and 21-02)	AAF International Roto Clone, model 1655182-004. Wet dust collector, combining a dust collector with a centrifugal fan an a fine water film on the impeller blades to trap fine particles.
Rotoclone 2	EU 08	AAF International Roto Clone, model 131896-014. Wet dust collector, combining a dust collector with a centrifugal fan an a fine water film on the impeller blades to trap fine particles.

Section GG.12: Notes, Comments, and Explanations

DEP7007 PERMIT APPLICATION FORMS

DEP7007N

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007N

Source Emissions Profile

__ Section N.1: Emission Summary
__ Section N.2: Stack Information
__ Section N.3: Fugitive Information
__ Section N.4: Notes, Comments, and Explanations

Additional Documentation

___ Complete DEP7007AI

Source Name: Marzetti Manufacturing Company
KY EIS (AFS) #: 21- 099-00035
Permit #: F-19-030 R3
Agency Interest (AI) ID: 71651
Date: 8/16/2024

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
1	Three Natural Gas-Fired Indirect Heat Exchangers	1	Three Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	1	20.9 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.15 SOx - 0.012 VOC - 0.11 NOx - 1.94 CO- 1.63	N/A	PM - 0.64 SOx - 0.051 VOC - 0.47 NOx - 8.47 CO- 7.12	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
2	Three Natural Gas-Fired Indirect Heat Exchangers	2	Three Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	1	20.9 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.15 SOx - 0.012 VOC - 0.11 NOx - 1.94 CO- 1.63	N/A	PM - 0.64 SOx - 0.051 VOC - 0.47 NOx - 8.47 CO- 7.12	N/A
3	Four Natural Gas-Fired Indirect Heat Exchangers	3	Four Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	2	1.095 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.0080 SOx - 0.00063 VOC - 0.0058 NOx - 0.105 CO- 0.089	N/A	PM - 0.035 SOx - 0.0028 VOC - 0.025 NOx - 0.46 CO- 0.39	N/A
4	Four Natural Gas-Fired Indirect Heat Exchangers	4	Four Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	2	1.095 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.0080 SOx - 0.00063 VOC - 0.0058 NOx - 0.105 CO- 0.089	N/A	PM - 0.035 SOx - 0.0028 VOC - 0.025 NOx - 0.46 CO- 0.39	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
5	Four Natural Gas-Fired Indirect Heat Exchangers	5	Four Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	2	2.58 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.019 SOx - 0.0015 VOC - 0.014 NOx - 0.25 CO- 0.21	N/A	PM - 0.083 SOx - 0.007 VOC - 0.060 NOx - 1.09 CO- 0.91	N/A
6	Four Natural Gas-Fired Indirect Heat Exchangers	6	Four Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	2	2.58 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.019 SOx - 0.0015 VOC - 0.014 NOx - 0.25 CO- 0.21	N/A	PM - 0.083 SOx - 0.007 VOC - 0.060 NOx - 1.09 CO- 0.91	N/A
8	Spice Room	8	Spice Room	Rotoclone 2	Rotoclone 2	Rotoclone 2	54.8 tons/hr	PM, PM2.5, PM10	PM (3.1 kg/bbl/yr)	AP-42	N/A	99	PM - 42.97	PM - 0.28	PM - 188.19	PM - 0.61
9	Cook Kitchen Cooking Vessels	9	Cook Kitchen Cooking Vessels	Rotoclone 1	Rotoclone 1	Rotoclone 1	See 09-01 and 09-02 below	PM, PM2.5, PM10, VOC	PM (3.1 kg/bbl/yr)	AP-42	N/A	99	N/A	See Below	N/A	See Below
09-01	Propriety Spice Mixture/Dry Ingredient Transfer	09-01	Propriety Spice Mixture/Dry Ingredient Transfer	Rotoclone 1	Rotoclone 1	Rotoclone 1	54.8 tons/hr	PM, PM2.5, PM10	PM (3.1 kg/bbl/yr)	AP-42	N/A	99	PM - 55.25	PM - 0.36	PM - 241.99	PM - 0.78
09-02	Various Proof Distillate Alcohols/Distillate Cooking	09-02	Various Proof Distillate Alcohols/Distillate Cooking	Rotoclone 1	Rotoclone 1	Rotoclone 1	42.67 gallons/hr	VOC	VOC (0.1242 kg/bbl/yr)	AP-42	N/A	N/A	VOC - 5.302	N/A	VOC - 23.22	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
10	Ink Jet and Spray Stencil	10	Ink Jet and Spray Stencil	N/A	N/A	Vents to interior	See 10a-d below	VOC	N/A	AP-42	N/A	N/A	See Below	N/A	See Below	N/A
10a	Video Jet Ink Usage	10a	Video Jet Ink Usage	N/A	N/A	Vents to interior	0.1268 gallons/hr	VOC	VOC (5.72 lb/gal)	AP-42	N/A	N/A	VOC - 0.73	N/A	VOC - 3.18	N/A
10b	Video Jet Make-up Fluid Usage	10b	Video Jet Make-up Fluid Usage	N/A	N/A	Vents to interior	0.2536 gallons/hr	VOC	VOC (6.59 lb/gal)	AP-42	N/A	N/A	VOC - 1.67	N/A	VOC - 7.32	N/A
10c	Video Jet Clean-up Solvent	10c	Video Jet Clean-up Solvent	N/A	N/A	Vents to interior	0.0076 gallons/hr	VOC	VOC (8.42 lb/gal)	AP-42	N/A	N/A	VOC - 0.064	N/A	VOC - 0.28	N/A
10d	Marsh Ink Usage	10d	Marsh Ink Usage	N/A	N/A	Vents to interior	0.3170 gallons/hr	VOC	VOC (7.6 lb/gal)	AP-42	N/A	N/A	VOC - 2.41	N/A	VOC - 10.55	N/A
11	Diesel-Fired Emergency Generator	11	Diesel-Fired Emergency Generator	N/A	N/A	4	1.52 MMBtu/hr	NOX,CO,SOX, PM	NOX(4.41 lb/mmbtu) CO (0.95 lb/mmbtu) SOX(0.29 lb/mmbtu) PM (0.31 lb/mmbtu)	AP-42	N/A	N/A	PM - 2.34 NOx - 33.25 CO - 7.16 SOx - 2.19	N/A	PM - 0.58 NOx - 8.31 CO - 1.79 SOx - 2.19	N/A
12	Natural Gas-Fired Water Heater	12	Natural Gas-Fired Water Heater	N/A	N/A	12(01)	15 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (50 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.11 SOx - 0.0087 VOC - 0.079 NOx - 1.44 CO- 1.21	N/A	PM - 0.48 SOx - 0.038 VOC - 0.35 NOx - 6.33 CO- 5.31	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
16	Three Natural Gas-Fired Indirect Heat Exchangers	16	Three Natural Gas-Fired Indirect Heat Exchangers	N/A	N/A	1	20.9 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.15 SOx - 0.012 VOC - 0.11 NOx - 2.01 CO- 1.69	N/A	PM - 0.67 SOx - 0.053 VOC - 0.49 NOx - 8.82 CO- 7.41	N/A
17	Four Natural Gas-Fired Space Heaters	17	Four Natural Gas-Fired Space Heaters	N/A	N/A	3	1.095 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.008 SOx - 0.0006 VOC - 0.0058 NOx - 0.11 CO- 0.89	N/A	PM - 0.035 SOx - 0.003 VOC - 0.025 NOx - 0.46 CO- 0.39	N/A
18	Four Natural Gas-Fired Space Heaters	18	Four Natural Gas-Fired Space Heaters	N/A	N/A	3	1.095 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.008 SOx - 0.0006 VOC - 0.0058 NOx - 0.11 CO- 0.89	N/A	PM - 0.035 SOx - 0.003 VOC - 0.025 NOx - 0.46 CO- 0.39	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
19	Four Natural Gas-Fired Space Heaters	19	Four Natural Gas-Fired Space Heaters	N/A	N/A	3	2.58 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.019 SOx - 0.0015 VOC - 0.014 NOx - 0.25 CO- 0.21	N/A	PM - 0.083 SOx - 0.007 VOC - 0.060 NOx - 1.09 CO- 0.91	N/A
20	Four Natural Gas-Fired Space Heaters	20	Four Natural Gas-Fired Space Heaters	N/A	N/A	3	2.58 MMBtu/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	PM - 0.019 SOx - 0.0015 VOC - 0.014 NOx - 0.25 CO- 0.21	N/A	PM - 0.083 SOx - 0.007 VOC - 0.060 NOx - 1.09 CO- 0.91	N/A
21	New Kitchen - Cooking Vessels, Sets #3, #4, & #5	21	New Kitchen - Cooking Vessels, Sets #3, #4, & #5	Rotoclone 1	Rotoclone 1	Rotoclone 1	See 21-01 and 21-02 below	PM, PM2.5, PM10, VOC	PM (3.1 kg/bbl/yr)	AP-42	N/A	99	N/A	See Below	N/A	See Below
21-01	Propriety Spice Mixture/Dry Ingredient Transfer	21-01	Propriety Spice Mixture/Dry Ingredient Transfer	Rotoclone 1	Rotoclone 1	Rotoclone 1	82.2 tons/hr	PM, PM2.5, PM10	PM (3.1 kg/bbl/yr)	AP-42	N/A	99	PM - 55.25	PM - 0.36	PM - 241.99	PM - 0.78
21-02	Various Proof Distillate Alcohols/Distillate Cooking	21-02	Various Proof Distillate Alcohols/Distillate Cooking	Rotoclone 1	Rotoclone 1	Rotoclone 1	64 gallons/hr	VOC	VOC (0.1242 kg/bbl/yr)	AP-42	N/A	99	VOC - 7.953	N/A	VOC - 34.8	N/A

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity *(SCC Units/hour)*	Pollutant	Uncontrolled Emission Factor *(lb/SCC Units)*	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency *(%)*	Control Efficiency *(%)*	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential *(lb/hr)*	Controlled Potential *(lb/hr)*	Uncontrolled Potential *(tons/yr)*	Controlled Potential *(tons/yr)*
22	Natural Gas-Fired Emergency Generator	22	Natural Gas-Fired Emergency Generator	N/A	N/A	5	1873.5 scf/hr	PM, PM2.5, PM10, SO2, SOx, VOC, Nox, CO	PM (7.6 lbs./MMscf), PM2.5 (7.6 lbs./MMscf), PM10 (7.6 lbs./MMscf), SO2 (0.6lbs./MMscf), SOx (0.6bs./MMscf), VOC(5.5 lbs./MMscf), Nox (100 lbs./MMscf), CO (84 lbs./MMscf)	AP-42	N/A	N/A	NOx - 2.04 CO - 4.082 VOC - 4.082	N/A	NOx - 0.035 CO - 0.069 VOC - 0..069	N/A

Section N.2: Stack Information

UTM Zone:

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter *(ft)*	Height *(ft)*	Base Elevation *(ft)*	Northing *(m)*	Easting *(m)*	Flowrate *(acfm)*	Temperature *(° F)*	Exit Velocity *(ft/sec)*
1	1, 2, 16	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
2	3, 4, 5, 6,	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
3	17, 18, 19, 20	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
4	11	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
5	22	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
Rotoclone 1	09-01, 21-01	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
Rotoclone 2	8	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit
12(01)	12	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit

Section N.3: Fugitive Information

UTM Zone:

Emission Unit #	Emission Unit Name	Process ID	Area Physical Data		Area UTM Coordinates		Area Release Data	
			Length of the X Side *(ft)*	Length of the Y Side *(ft)*	Northing *(m)*	Easting *(m)*	Release Temperature *(°F)*	Release Height *(ft)*
10	Ink Jet and Spray Stencil	10	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit	No change since previous permit

Section N.4: Notes, Comments, and Explanations

Calculations in this sources emissions profile are based on AP-42 factors, maximum design capacity for each unit, and 8760 hours/year. Actual emissions are below these potential emissions based on lower usage and lesser hours per year. No changes to permitted sources has occured during this renewal period since the last recent significant revision.

Updates to calculations include: Removal of the Rotoclone control device from the VOC emission source calculations associated with alcohol use during production since PM is controlled and VOC is not controlled by Rotoclone device.

Updates also include: Change of category for the VOC emissions from controlled to uncontrolled to more accurately reflect the site's conditions.

For emission units EU09-01, EU21-01, and EU08, the total reported emissions are uncontrolled emissions. These emission units are controlled with Rotoclones. EU09-01, and EU21-01 are controlled by model number 1655182-004, and EU08 is controlled by a Rotoclone with model number 131896-014. Both of these have a removal efficiency of 99% for particulate matter.