## AIR POLLUTION CONDITIONAL MAJOR PERMIT RENEWAL APPLICATION

(Current Operating Air Quality Permit F-17-017) Issuance Date: November 30, 2019 Expiration Date: November 30, 2024

(September 2024)

Prepared for:

KENLAKE FOODS 300 North L.P. Miller Street Murray, KY 42071

Prepared by:



659 Van Meter Street Cincinnati, Ohio 45202 (513) 241-1230



300 North L. P. Miller Street, Murray, Kentucky 42071, 270-762-5100

September 6, 2024

Permit Review Branch Division for Air Quality 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, KY 40601

Subject: Air Pollution Conditional Major Permit Renewal Application for Kenlake Foods, Murray, Kentucky Permit# F-19-017

Dear Permit Reviewer:

Please find our Air Pollution Permit Renewal Application, uploaded for submittal at the Kentucky One Stop Business Portal. Kenlake Foods, located in Murray, Kentucky, currently operates under Operating Air Quality Permit # F-19-017, expiring on November 30, 2024.

The facility is a currently permitted as a minor source with total potential to emit of each criteria pollutant less than 100 tons/year and HAPS less than 10 ton/year each and less than 25 tons/year combined.

The emission unit Oat Room Vacuum (EU09) has been removed from the facility. This unit has been removed from all applications, provided maps, and removed from the facility PTE calculations.

Should you have any questions concerning the application, please feel free to contact Kenlake's Plant Engineer, Ken Holdener at (270) 762-5100 or our Environmental Consultant, Gabrielle Fadul of Hixson at (513) 241-1230.

Sincerely,

Justin Menees Site Leader

Division	for Air Qu	ality		DEP7	)07AI	Add	litional Documentation
		anty	Admi	nistrativo	e Information		
300 So	wer Boulevar	ď	Sect	tion AI.1: S	ource Information	Additi	onal Documentation attached
Frankf	fort, KY 4060	1	Sect	tion AI.2: A	pplicant Information		
(502	2) 564-3999		Sect	tion AI.3: C	Wher Information		
			Sect	tion AI.4: T	ype of Application		
			Sect	tion AI.5: C	Other Required Information	tion	
			Sect	tion AI.6: S	ignature Block		
			Sect	tion AI.7: N	lotes, Comments, and E	Explanations	
Source Name:		Kenlake F	oods				
KY EIS (AFS) #:		21- 035-00031					
Permit #:		F-19-017					
Agency Interest (AI)	) ID:	509					
Date:		9/6/2024					
Section AI.1: S	ource Info	rmation					
Physical Location	Street:		L.P. Miller Street				
Address:	City: Street or	Murray		County:	Calloway	Zip Code:	42071
Mailing Address:	P.O. Box:	300 North	L.P. Miller Street				
	City:	Murray		State:	Kentucky	Zip Code:	42071
			Standard Coo	rdinates fo	r Source Physical Loc	cation	
Longitude:	8	38.298044	(decimal degrees)		Latitude:	36.613536	(decimal degrees)
Primary (NAICS) Ca	tegory:	Roasted Nu Manufactur	its and Peanut Butter ring	_	Primary NAICS #:	311911	

Classification (SIC) (	Categ	ory:	Salted and Ro	asted Nuts a	and Seeds		Primary SIC #:	2068	
Briefly discuss the ty conducted at this site	-		Facility roasts a	nd packages	nuts, package	d oats, and	formulate/package powdered fo	od products.	
Description of Area Surrounding Source:		Rural Area Urban Area		ial Park $\Box$ ial Area $\Box$	Residentia Commerc		Is any part of the source located on federal land?	□ Yes ☑ No	Number of Employees: 360
Approximate distanc to nearest residence o commercial property	or	20 Fee	et		Property Area:	6.8	Acres	Is this source portable? $\Box$	Yes No
		What othe	r environmen	tal permits	or registrat	tions does	this source currently hold o	or need to obtain in Kentuc	cky?
NPDES/KPDES:		Currently Hol	d	Need	V	N/A			
Solid Waste:		Currently Hol	d	Need	V	N/A			
RCRA:	7	Currently Hol	d	Need		N/A			
UST:		Currently Hol	d	Need	V	N/A			
Type of Regulated		Mixed Waste	Generator	7	Generator		Recycler	Other:	
Waste Activity:		U.S. Importer	of Hazardous V	Vaste 🗆	Transport	er 🗆	Treatment/Storage/Disposal	Facility D N/A	

Section AI.2: App	plicant Information					
Applicant Name:	Kenlake Foods					
Title: (if individual)						
Mailing Address:	Street or P.O. Box:	300 North L.P. Miller St	treet			
1914 milling 7 fuur 055.	City:	Murray	State:	Kentucky	Zip Code:	42071
Email: (if individual)						
Phone:	(270) 762-5100					
Technical Contact						
Name:	Kenneth Holdener					
Title:	Senior Engineering Leader					
Mailing Address:	Street or P.O. Box:			300 North L.P. Miller St	treet	
ivianing ruuress.	City: Murray		State:	Kentucky	Zip Code:	42071
Email:	ken.holdener@kroger.com					
Phone:	270-762-5125					
Air Permit Contact for S	Source					
Name:	Kenneth Holdener					
Title:						
Mailing Address:	Street or P.O. Box:	300 North L.P. Miller St	treet			
Maning Address.	City:	Murray	State:	Kentucky	Zip Code:	42071
Email:	ken.holdener@kroger.com					
Phone:	270-762-5125					

Section AI.3: Ov	vner Information					
□ Owner same	as applicant					
Name:	Kroger, Limited Partner	ship II				
Title:	The Kroger Company					
Mailing Address:	Street or P.O. Box:	1014 Vine Street, St	uite 1000			
Maning Address.	City:	Cincinnati	State:	Ohio	Zip Code:	45202-1119
Email:						
Phone:						
List names of owners a	nd officers of the company	who have an interest in the	e company of 5% (	or more.		
	Name			Posit	ion	

Current Status:       Title V       Conditional Major       State-Origin       General Permit       Registration       Non         Name Change       Initial Registration       Significant Revision       Administrative Permit Amendment         Requested Action:       Renewal Permit       Revised Registration       Minor Revision       Initial Source-wide OperatingPermit         (check all that apply)       502(b)(10)Chang       Extension Request       Addition of New Facility       Portable Plant Relocation Notice	t
Image       Initial Registration       Significant Revision       Administrative Permit Amendment         Image       Renewal Permit       Revised Registration       Minor Revision       Initial Source-wide OperatingPernt         Requested Action:       502(b)(10)Chang       Extension Request       Addition of New Facility       Portable Plant Relocation Notice	
Requested Action: (check all that apply) $\Box$ $502(b)(10)$ ChangExtension Request $\Box$ Addition of New Facility $\Box$ Portable Plant Relocation Notice	uit
$(check all that apply) \square 502(b)(10)Chang \square Extension Request \square Addition of New Facility \square Portable Plant Relocation Notice$	
□ Revision □ Off Permit Change □ Landfill Alternate Compliance Submittal□ Modification of Existing Facilities	
□ Ownership Chang□ Closure	
Requested Status: □ Title ☑ Conditional Major □ State-Origin □ PSD □ NSR □ Other:	
Is the source requesting a limitation of potential emissions?	
Pollutant:Requested Limit:Pollutant:Requested Limit:	
Particulate Matter          Single HAP	
Volatile Organic Compounds (VOC) <ul> <li>Combined HAPs             </li> </ul>	
Carbon Monoxide       Air Toxics (40 CFR 68, Subpart F)	
□ Nitrogen Oxides □ Carbon Dioxide	
Sulfur Dioxide     Image: Greenhouse Gases (GHG)	
Lead     Other	
For New Construction:	
Proposed Start Date of Construction:       (MM/YYYY)         (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.       Identify any non-applicable requirements for which permit shield.         Applicant is seeking coverage under a permit shield.       Identify any non-applicable requirements for which permit shield.	eld is

## Section AI.5 Other Required Information

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

## 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.

**Authorized Signature** 

9/6/2024 Date

Justin Menees

Type or Printed Name of Signatory

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

Site Leader

**Title of Signatory** 

Section AI.7: Notes, Comments, and Explanations

11/2018							DI	EP7007
Division	for Air O	volity		DEP7(	)07AI	Ad	ditional Documentation	
	for Air Q	uality	Admi	nistrative	e Information			
300 Sc	wer Bouleva	ard	Sect	ion AI.1: S	ource Information	Addit	ional Documentation attached	
Frank	fort, KY 406	01	Sect	ion AI.2: A	pplicant Information			
(50	2) 564-3999				wner Information ype of Application			
L			Sect	ion AI.5: C	ther Required Information	ation		
			Sect	ion AI.6: S	ignature Block			
			Sect	tion AI.7: N	lotes, Comments, and	Explanations		
Source Name:		Kenlake Foo	ods					
KY EIS (AFS) #:		21- 035-00031						
Permit #:		F-19-017						
Agency Interest (AI	) ID:	509						
Date:		9/6/2024					-	
Section AI.1: S	ource Inf	ormation						
Physical Location	Street:	300 North L.	P. Miller Street					
Address:	City: Street or	Murray		_ County:	Calloway	Zip Code:	42071	
Mailing Address:	P.O. Box:	300 North L.	P. Miller Street					
	City:	Murray		State:	Kentucky	Zip Code:	42071	
			Standard Coo	rdinates fo	r Source Physical Lo	ocation		
Longitude:		88.298044	(decimal degrees)		Latitude:	36.613536	(decimal degrees)	
Primary (NAICS) Ca	ategory:	Roasted Nuts Manufacturin	and Peanut Butter		Primary NAICS #:	311911		

and the second base of the second second

Classification (SIC) C	ategory:	Salted and Roasted Nuts	and Seeds	Primary SIC #:	2068	
Briefly discuss the typ conducted at this site:	e of business	Facility roasts and package	es nuts, packaged oats, an	d formulate/package powdered fo	od products.	
Description of Area Surrounding Source:	<ul><li>Rural Area</li><li>Urban Area</li></ul>	□ Industrial Park ☑ Industrial Area	<ul><li>Residential Area</li><li>Commercial Area</li></ul>	Is any part of the source located on federal land?	□ Yes ☑ No	Number of Employees: 360
Approximate distance to nearest residence o commercial property:	r	pet	Property Area:6.	8 Acres	Is this source portable?	TYes No
	What oth	er environmental permi	ts or registrations doe	es this source currently hold	or need to obtain in Ken	tucky?
NPDES/KPDES:	Currently Ho	old 🗌 Need	🖸 N/A			
Solid Waste:	Currently Ho	old 🗌 Need	☑ N/A			
RCRA:	Currently He	old 🗌 Need	🗆 N/A			
UST:	Currently H	old 🗌 Need	☑ N/A			
Type of Regulated	☐ Mixed Wast	e Generator	Generator	🗆 Recycler	Other:	_
Waste Activity:	U.S. Importe	er of Hazardous Waste	Transporter	Treatment/Storage/Disposa	l Facility 🛛 N	/A

11/2018
---------

Section AI.2: Ap	plicant Information					
Applicant Name:	Kenlake Foods					
Title: (if individual)						
₩ <b>//-</b> *14	Street or P.O. Box:	300 North L.P. Miller	Street			
Mailing Address:	City:	Murray	State:	Kentucky	Zip Code:	42071
Email: (if individual)				······		
Phone:	(270) 762-5100					
Technical Contact						
Name:	Kenneth Holdener	· · · · · · · · · · · · · · · · · · ·				
Title:	Senior Engineering Leader					
Mailing Address:	Street or P.O. Box:		3	00 North L.P. Miller S	Street	
Mannig Autress.	City: Murray		State:	Kentucky	Zip Code:	42071
Email:	ken.holdener@kroger.com					
Phone:	270-762-5125					
Air Permit Contact for	Source			······································		
Name:	Kenneth Holdener			·····		
Title:						
Mailing Address:	Street or P.O. Box:	300 North L.P. Miller	Street			
Mannig Auuress:	City:	Murray	State:	Kentucky	Zip Code:	42071
Email:	ken.holdener@kroger.com					
Phone:	270-762-5125					

Owner same	as applicant					
Name:	Kroger, Limited Partner	ship II				
Title:	The Kroger Company					
	Street or P.O. Box:	1014 Vine Street, S	uite 1000			
Mailing Address:	City:	Cincinnati	State:	Ohio	Zip Code:	45202-1119
Email:						anna an
<b>Phone:</b>	•					
names of owners a	nd officers of the company v Name	vho have an interest in the	company of 5% o	r more. Posit	ion	
	1 166 A A 1 10					

1	1	/2	0	1	8	

Section AI.4: Type	of Application						
Current Status:	🗖 Title V 🔽 Conditi	onal Major	State-O	rigin	🔲 General Permit	🗆 Registrat	ion 🗌 None
	🗌 Name Change	🛛 Initial Reg	istration		Significant Revision	🗆 Administ	trative Permit Amendment
	🔽 Renewal Permit	□ Revised R	egistration		Minor Revision	Initial Sc	ource-wide OperatingPermit
Requested Action: (check all that apply)	□ 502(b)(10)Change	□ Extension	Request		Addition of New Facility	🗋 Portable	Plant Relocation Notice
	Revision	□ Off Permit	t Change		Landfill Alternate Compliance Submittal	🗌 Modifica	tion of Existing Facilities
	Ownership Change	Closure					
Requested Status:	🗖 Title V 🗔 Conditi	onal Major	□ State-O	rigin	□ PSD □ NSR	Other:	
Is the source requesting a	a limitation of potentia	l emissions?		[	]Yes 🗹 No		
Pollutant:		Requested L	imit:		Pollutant:		Requested Limit:
Particulate Matter					□ Single HAP		
U Volatile Organic Co	mpounds (VOC)				Combined HAPs		
🔲 Carbon Monoxide					□ Air Toxics (40 CFR 68, Su	ıbpart F)	
□ Nitrogen Oxides					□ Carbon Dioxide		
🔲 Sulfur Dioxide					Greenhouse Gases (GHG)		
🗆 Lead				÷	□ Other		
For New Construction	n:						
	Date of Construction: M/YYYY)				Proposed Operation Start-Up Date: (1	MM/YYYY)	
For Modifications:							
-	Date of Modification: M/YYYY)				Proposed Operation Start-Up Date: (A		
Applicant is seeking c	overage under a permit s	hield.	□ Yes				ents for which permit shield is ent to the application.

Section AI.5 Other Required Information												
Indicate the documents attached as part of this application:												
DEP7007A Indirect Heat Exchangers and Turbines	DEP7007CC Compliance Certification											
J DEP7007B Manufacturing or Processing Operations	☑ DEP7007DD Insignificant Activities											
DEP7007C Incinerators and Waste Burners	□ DEP7007EE Internal Combustion Engines											
DEP7007F Episode Standby Plan	DEP7007FF Secondary Aluminum Processing											
DEP7007J Volatile Liquid Storage	DEP7007GG Control Equipment											
DEP7007K Surface Coating or Printing Operations	DEP7007HH Haul Roads											
DEP7007L Mineral Processes	Confidentiality Claim											
DEP7007M Metal Cleaning Degreasers	Ownership Change Form											
J DEP7007N Source Emissions Profile	Secretary of State Certificate											
DEP7007P Perchloroethylene Dry Cleaning Systems	Flowcharts or diagrams depicting process											
DEP7007R Emission Offset Credit	Digital Line Graphs (DLG) files of buldings, roads, etc.											
DEP7007S Service Stations	☑ Site Map											
DEP7007T Metal Plating and Surface Treatment Operations	☑ Map or drawing depicting location of facility											
DEP7007V Applicable Requirements and Compliance Activities	□ Safety Data Sheet (SDS)											
DEP7007Y Good Engineering Practice and Stack Height Determination	Emergency Response Plan											
DEP7007AA Compliance Schedule for Non-complying Emission Units	✓ Other:											
DEP7007BB Certified Progress Report												

## 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.

Authorized Signature

Justin Menees

Type or Printed Name of Signatory

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

9/6/2024

Date

Site Leader

Title of Signatory

Section AI.7: Notes, Commen	ats, and Explanations		
	Handan		
**************************************	B		
Neuronau (1997)			
	·		······
		_	
<u></u>		······	······································
		· ····	
	a		
	P	·····	

and the second second

Division	for Air Qu	ality		DE	Additional Documentation									
Division	ioi i iii Qu	unty	Ι	ndirect Heat Ex	changers a	and Turbin	es		Comj	plete DEP7	7007AI, DE	EP7007N,		
300 So	wer Boulevar	ď		Section A.1: Ge	eneral Informa	ation			DEP7007	V, and DE	2P7007GG.			
Frankf	ort, KY 4060	1		Section A.2: Op	perating and F	uel Informatio	on		Mar	nufacturer's	s specificati	ons		
(502	2) 564-3999			Section A.3: No	otes, Commen	nts, and Explar	nations							
Source Name:						Kenla	ake Foods							
KY EIS (AFS) #	<b>:</b>	21-035-00	0031											
Permit #:				F-19-017										
Agency Interest	(AI) ID:			509										
Date:						9/	6/2024							
Section A.1:	General I	nformati	ion											
Section A.1: General Info Emission Unit # Emission Unit Name Pro		Process ID	Process Name	Identify General Type: Indirect Heat Exchanger, Gas Turbine, or Combustion Turbine	Indirect Heat Exchanger Configuration	Manufacturer	Model No./ Serial No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	SCC Code	SCC Units	Control Device ID	Stack ID		
EU01	BOILER #1	EU01	Indirect Water Heater	Indirect Heat Exchanger	Shell and Tube	Cleaver Brooks	CB-200-100	1982	10200603	MMCF	N/A	E01		
EU02	BOILER #2	EU02	Indirect Water Heater	Indirect Heat Exchanger	Shell and Tube	Cleaver Brooks	CB-200-100	1982	10200603	MMCF	NA	E02		
EU03a	NUT ROASTER #1	EU03	Nut Roaster	Indirect Heat Exchanger	Coil-Type	Mastermatic	C24-30	1982	10200603	MMCF	N/A	E03a		
EU06	NUT ROASTER #2	EU06	Nut Roaster	Indirect Heat Exchanger	Coil-Type	Heat and Control	CTHX-20	2005	10200603	MMCF	N/A	E06		

Division	for Air Qu	ality		DE	P7007A				A	Additional Documentation					
2111011	<b>X</b>		I	ndirect Heat Ex	changers a	nd Turbin	es				7007AI, DE				
300 So	wer Boulevar	d		Section A.1: Ge	eneral Informa	ation			DEP7007	V, and DE	EP7007GG.				
Frankf	ort, KY 4060	1		Section A.2: Op	perating and F	uel Informatio	on		Manufacturer's specifications						
(502	2) 564-3999			Section A.3: No	otes, Commen	ts, and Explar	nations								
Source Name:						Kenla	ake Foods								
KY EIS (AFS) #	:	21-035-00	031												
Permit #:				F-19-017											
Agency Interest	(AI) ID:			509											
Date:				9/6/2024											
Section A.1:	General I	nformati	on												
Emission Unit #	Emission Unit Name	Process ID	Process Name	Identify General Type: Indirect Heat Exchanger, Gas Turbine, or Combustion Turbine	Indirect Heat Exchanger Configuration	Manufacturer	Model No./ Serial No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	SCC Code	SCC Units	Control Device ID	Stack ID			
EU01	BOILER #1	EU01	Indirect Water Heater	Indirect Heat Exchanger	Shell and Tube	Cleaver Brooks	CB-200-100	1982	10200603	MMCF	N/A	E01			
EU02	BOILER #2	EU02	Indirect Water Heater	Indirect Heat Exchanger	Shell and Tube	Cleaver Brooks	CB-200-100	1982	10200603	MMCF	NA	E02			
EU03a	NUT ROASTER #1	EU03	Nut Roaster	Indirect Heat Exchanger	Coil-Type	Mastermatic	C24-30	1982	10200603	MMCF	N/A	E03a			
EU06	NUT ROASTER #2	EU06	Nut Roaster	Indirect Heat Exchanger	Coil-Type	Heat and Control	CTHX-20	2005	10200603	MMCF	N/A	E06			

Section A.2: Operating and Fuel Information														
				Rated Capacity			Describe Operating Scenario	Classify Fuel as	<b>Identify Fuel Type:</b> Coal, Natural Gas, Wood,	Heat Co	ntent (HHV)	Maximum	Ash	Sulfur
Space Heat	Process Heat	Power	Emergency	Heat Input (MMBTU/hr)		(Specify units: hp, MW, or lb steam/hr)	(only if this unit will be used in different configurations)	Primary or Secondary	Gas, Fuel Oil # (specify 1- 6), or Other		(Specify units: Btu/lb, Btu/gal, or Btu/scf)	Hours	(%)	Content (%)
100	0	0	0	4.148	3,450	steam/hr	N/A	Primary	Natural Gas	1021	BTU/scf	8736		
100	0	0	0	4.148	3,450	steam/hr	N/A	Primary	Natural Gas	1021	BTU/scf	8736		
0	100	0	0	2.7			N/A	Primary	Natural Gas	1021	BTU/scf	8736		
0	100	0	0	2.8			N/A	Primary	Natural Gas	1021	BTU/scf	8736		
	If mul perc Space Heat 100 100	If multipurpose       percentage of       Space       Heat       100       0       0       100	If multipurpose unit, ide percentage of use by p         Space Heat       Process Heat       Power         100       0       0         100       0       0         100       0       0         100       0       0         100       0       0         100       0       0         100       0       0	If multipurpose unit, identify the percentage of use by purpose         Space Heat       Process Heat       Power       Emergency         100       0       0       0       0         100       0       0       0       0         100       0       0       0       0         100       0       0       0       0         100       0       0       0       0         100       0       0       0       0	If multipurpose unit, identify the percentage of use by purpose     Rated Capacity Heat Input (MMBTU/hr)       Space Heat     Process Heat     Power     Emergency     Anticipation       100     0     0     0     4.148       100     0     0     0     4.148       100     0     0     0     2.7	If multipurpose unit, identify the percentage of use by purposeRated Capacity Heat Input (MMBTU/hr)Rated PowerSpace HeatProcess HeatPowerEmergencyHeat Input (MMBTU/hr)Rated Power10000004.1483,45010000004.1483,45010000002.710001000002.7100	If multipurpose unit, identify the percentage of use by purposeRated Capacity Heat Input (MBTU/hr)Rated Capacity Power OutputSpace HeatProcess HeatPowerEmergencyRated Capacity (MBTU/hr) $(Specify)$ units: hp, MW, or lb steam/hr)1000004.1483,450steam/hr1000004.1483,450steam/hr1000002.7Image: colspan="4">Image: colspan="4"10000002.7Image: colspan="4"01000002.7Image: colspan="4"	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Heat Input (MMBTU/hr)       Rated Capacity Power Output       Describe Operating Scenario (only if this unit will be used in different configurations)         Space Heat       Process Heat       Power       Emergency       MBTU/hr)       Image: Rated Capacity Heat Input (MBTU/hr)       Image: Rated Capacity Power Output       Describe Operating Scenario (only if this unit will be used in different configurations)         100       0       0       0       4.148       3,450       steam/hr       N/A         100       0       0       0       4.148       3,450       steam/hr       N/A         100       0       0       0       2.7       Image: Rated Capacity Power Output       N/A         0       100       0       0       2.7       Image: Rated Capacity Power Output       N/A	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Heat Input (MMBTU/hr)       Rated Capacity Power Output (Specify units: hp, MW, or b)       Describe Operating Scenario (only if this unit will be used in different configurations)       Classify Fuel as Primary or Secondary         Space Heat       Process Heat       Power       Emergency       MBTU/hr)       Image: Space (MBTU/MR)       Specify units: hp, MW, or b)       Describe Operating Scenario (only if this unit will be used in different configurations)       Classify Fuel as Primary or Secondary         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary         100       0       0       0       2.7       Image: Specify units in this unit will be used in different configurations)       Primary         100       100       0       0       2.7       Image: Specify units in this unit will be used in different configurations)       Primary         100       100       0       0       2.7       Image: Specify units in this unit will be used in different configurations)       Primary         100       100       0       100       100       100       100       100       100       100       1	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Heat Input (MMBTU/hr)       Rated Capacity Power Output       Describe Operating Scenario (only if this unit vill be used in different configurations)       Classify Fuel as Primary or Scenary on Scenario (only if this unit vill be used in different configurations)       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfill/Digester Gas, Fuel Oil # (specify 1- 6), or Other         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas         100       0       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas         100       100       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas         100       100       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Heat Input (MBTU/hr)       Rated Capacity Power Output (MBTU/hr)       Describe Operating Scenario (only if this unit will be used in different configurations)       Classify Fuel as Primary or Secondary       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfil/Digester Gas, Fuel Oil # (specify 1-6), or Other       Heat Coal         100       0       0       0       4.148       3.450       steam/hr       NIA       Primary       Natural Gas       1021         100       0       0       0       4.148       3.450       steam/hr       NIA       Primary       Natural Gas       1021         100       0       0       0       2.7       Image: Capacity Primary Or Primary       Natural Gas       1021         100       0       0       0       2.7       Image: Capacity Primary       Natural Gas       1021         100       0       0       0       2.7       Image: Capacity Primary       Natural Gas       1021         100       0       0       0       2.7       Image: Capacity Primary       Natural Gas       1021         100       0       0       0       2.7       Image: Capacity Primary       Natural Gas       1021         100       100       <	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity (Capacity MBTU/hr)       Rated Capacity (Capacity MBTU/hr)       Describe Operating Scenario (only if this unit will bused in different onfigurations)       Identify Fuel as primary of Secondary       Identify Fuel as primary of Capacity (Capacity Buulls) (Capacity MBTU/hr)       Rated Capacity (Capacity MMBTU/hr)       Describe Operating Scenario (only if this unit will bused in different onfigurations)       Identify Fuel as primary of Secondary       Identify Fuel as primary of Capacity (Capacity Buulls) (Capacity (Capacity MMBTU/hr))       Heat Content (HHV)         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas       1021       BTU/sef         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas       1021       BTU/sef         100       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas       1021       BTU/sef         100       0       0       0       0       4.148       3,450       steam/hr       N/A       Primary       Natural Gas       1021       BTU/sef         100       0       0       0       2.7       Image (antheread compare)       N/A	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Power Output Capacity Heat Input (MMBTU/hr)       Rated Capacity Power Output (MMBTU/hr)       Describe Operating Scenario (only if this unit will buisd in difference) on figurations)       Identify Fuel as Primary or Scondary       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, LandfII/Digester Gas, Fuel Oil # (specify units: Buu/h, Buu/gal, or Buu/scf)       Maximum Operating Hours         100       0       0       0       4.148       3.450       steam/hr       N/A       Primary or Scondary       Natural Gas       1021       BTU/scf       8736         100       0       0       0       4.148       3.450       steam/hr       N/A       Primary       Natural Gas       1021       BTU/scf       8736         100       0       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas       1021       BTU/scf       8736         100       0       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas       1021       BTU/scf       8736         100       0       0       0       2.7       Image: Steam/hr       N/A       Primary       Natural Gas       1021       BTU/scf       8736         100       0	If multipurpose unit, identify the percentage of use by purpose       Rated Capacity Heat Input (MMBTU/hr)       Rated Capacity Power Output Seconding (Specify units: hp, MMF, or h)       Describe Operating Scenario (only if fils unit will be used in different configurations)       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfil/Diggeter Gas, Paulo Li # (Specify units: Bhu/h, Bhu/gal, or Bhu/scf)       Maximum (Poreating Hours Primary or Secondary       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfil/Diggeter Gas, Paulo Li # (Specify units: Bhu/h, Bhu/gal, or Bhu/scf)       Maximum (Porating Hours Primary or Secondary       Identify Fuel Type: Coal, Natural Gas, Wood, Biomass, Landfil/Diggeter Gas, Paulo Li # (Specify units: Bhu/h, Bhu/gal, or Bhu/scf)       Ash Content (HHV)         100       0       0       0       4.148       3.450       steam/hr       NIA       Primary       Natural Gas       1021       BTU/scf       8736       58736         100       0       0       0       0       4.148       3.450       steam/hr       NIA       Primary       Natural Gas       1021       BTU/scf       8736       68736         100       0       0       0       0       2.7       Image: Coal Alpha Alp

l 1/2018 Emission	If multipurpose unit, identify the percentage of use by purpose				Rated Capacity	Capacity · Output	Describe Operating Scenario	Classify Fuel as	<b>Identify Fuel Type:</b> Coal, Natural Gas, Wood,	Heat Content (HHV)		Maximum	Ash	EP7007A Sulfur

-

Section A.3: Notes, Comments, and Explanations											

D	ivision for A	ir Quality			<b>DEP700</b> <sup>''</sup>		Additional Documentation							
	1111111111111	ii Quality		Manu	facturing o	r Process	ing	Complete DEP7	007AI, DEP7007	/N,				
	300 Sower Bo	oulevard			Operatio			DEP7007V, and DEP	7007GG.					
	Frankfort, KY	40601		Section B	.1: Process Info	ormation		Attach a flow dia	agram					
	(502) 564-				.2: Materials a		rmation	Attach SDS						
	(002)001				.3: Notes, Com									
			1		.5. Notes, Com	intents, and i	Explanations			]				
Source Na	me:		Kenlake Fo	ods										
KY EIS (A	FS) #:	21-	035-00031											
Permit #:			F-19-017	19-017										
Agency Int	erest (AI) ID:		509											
Date:			9/6/2024											
Section l	B.1: Process	Information												
Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)				
	Ambient Air			Ambient Air	Heat and									
EU04	Cooler	Ambient Air Cooler	EU04	Cooler	Control Heat and	AAC-3017	06/2010	Continuous	N/A	N/A				
EU07	Nut Roaster #2	Nut Roaster #2	EU07	Nut Roaster	Control	OR-5414	07/2005	Continuous	N/A	N/A				
	Ambient Air			Ambient Air	Heat and									
EU08	Cooler	Ambient Air Cooler	EU08	Cooler	Control	AAC-5614	07/2005	Continuous	N/A	N/A				

	Section B.2: Materials and Fuel Information *Maximum yearly fuel usage rate only applies if applicant request operating restrictions through federally enforceable limitations.														
Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Max Quantity Raw N	imum y of Each Iaterial put	Total Process Weight Rate for Emission Unit	Name of Finished	Maximum Each Finis	Quantity of hed Material utput		Maximu Fuel Us	m Hourly age Rate	Maximun Fuel Usa		Sulfur Content	Ash Content
				(Specify Units/hr)	(tons/hr)	Materials		(Specify Units/hr)			(Specify Units)		(Specify Units)	(%)	(%)
EU04	Ambient Air Cooler	Peanuts	5,000	lbs/hr	2.5	Roasted Peanuts	5,000	lbs/hr	N/A						
EU07	Nut Roaster #2	Peanuts	7,500	lbs/hr	3.75	Roasted Peanuts	7,500	lbs/hr	N/A						
EU08	Ambient Air Cooler	Peanuts	7,500	lbs/hr	3.75	Roasted Peanuts	7,500	lbs/hr	N/A						

DEP7007B

Emission Unit #	Emission Unit Name	Name of Raw Materials Input	T 4	Total Process Weight Rate for Emission Unit (tons/hr)	Name of Finished Materials	Maximum Quantity of Each Finished Material Output (Specify Units/hr)		Fuel Usa	n Hourly age Rate (Specify Units)	Maximum Fuel Usag	•	Sulfur Content (%)	Ash Content (%)	
--------------------	-----------------------	--------------------------------	-----	--	----------------------------------	--	--	----------	--	----------------------	---	--------------------------	-----------------------	--

Section B.3: Notes, Comments, and Explanations	

	Div	rision fo	or Air Q	uality					DEP700	7N						
	DIV	151011 10		uanty				Sourc	e Emissio	ons Profile			1	Additional l	Documentation	ı
	3	00 Sowe	r Boulev	ard				Section	n N.1: Emiss	ion Summary						
	I	Frankfort	, KY 406	501				Section	n N.2: Stack	Information			Compl	ete DEP70	07AI	
		(502) 5	564-3999					Section	n N.3: Fugiti	ve Information	ı					
								Section	n N.4: Notes	, Comments, an	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: Er	nission Su	ummar	У													
Emission	Emission	Process	Process	Control Device		Stack	Maximum Design	Pollutant	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Name	e Device ID	Capacity (SCC Units/hour)	ronutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
EU01	BOILER #1	EU01	Hot Water Heater	N/A	N/A	E01	4.04	Particulates	7.6	AP-42	0.00%	0.00%	0.03	0.03	0.13	0.13
								Sulfur Dioxide	0.6	AP-42	0.00%	0.00%	0.002	0.002	0.01	0.01
								Nitrogen Oxides	100	AP-42	0.00%	0.00%	0.4	0.4	1.73	1.73
								Carbon Monoxide	84	AP-42	0.00%	0.00%	0.33	0.33	1.46	1.46
								Volatile Organic compounds	5.5	AP-42	0.00%	0.00%	0.02	0.02	0.1	0.1
					<u> </u>											
					<b> </b>											
					<u> </u>											

	Div	vision fo	or Air Qı	ality					DEP700	)7N						
		151011 10		uanty				Sourc	e Emissio	ons Profile			1	Additional I	Documentation	ı
	3	300 Sowe	r Bouleva	ard				Section	n N.1: Emiss	sion Summary						
	]	Frankfort	, KY 406	01				Section	n N.2: Stack	Information			Compl	ete DEP700	07AI	
		(502) 5	564-3999					Section	n N.3: Fugiti	ve Information	1					
								Section	n N.4: Notes	, Comments, a	nd Explan	ations				
Source Na	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:					F-19-017	,										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: En	nission S	ummar	У													
Emission	Emission	Process	Process			Stack	Maximum Design	Pollutant	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	ol Control e Device ID C e ID C	Capacity (SCC Units/hour)	Ponutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential ( <i>lb/hr</i> )	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
EU02	BOILER #2	EU02	Hot Water Heater	N/A	N/A	E02	4.04	Particulates	7.6	AP-42	0.00%	0.00%	0.03	0.03	0.13	0.13
								Sulfur Dioxide	0.6	AP-42	0.00%	0.00%	0.002	0.002	0.01	0.01
								Nitrogen Oxides	100	AP-42	0.00%	0.00%	0.4	0.4	1.73	1.73
								Carbon Monoxide	84	AP-42	0.00%	0.00%	0.33	0.33	1.46	1.46
								Volatile Organic compounds	5.5	AP-42	0.00%	0.00%	0.02	0.02	0.1	0.1
															l	1

	Div	ision fo	r Air Qı	uality					<b>DEP700</b>	)7N						
	DIV	151011 10	I All Q	uanty				Sourc	e Emissio	ons Profile			I	Additional l	Documentation	1
	3	00 Sowe	r Boulev	ard				Sectio	n N.1: Emiss	ion Summary						
	I	Frankfort	, KY 406	01				Section	n N.2: Stack	Information			Compl	ete DEP70	07AI	
		(502) 5	564-3999					Section	n N.3: Fugiti	ve Information	ı					
								Sectio	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: Er	nission Su	ummar	у													
Emission	Emission	Process	Process			Stack	Maximum Design	Dollatout	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	e Device ID	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential ( <i>lb/hr</i> )	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
EU03a	Nut Roaster #1	EU03a	Nut Roster #1	N/A	N/A	E03-A	2.63	Particulates	7.6	AP-42	0.00%	0.00%	0.02	0.02	0.09	0.09
								Sulfur Dioxide	0.6	AP-42	0.00%	0.00%	0.002	0.002	0.01	0.01
								Nitrogen Oxides	100	AP-42	0.00%	0.00%	0.26	0.26	1.13	1.13
								Carbon Monoxide	84	AP-42	0.00%	0.00%	0.22	0.22	0.95	0.95
								Volatile Organic compounds	5.5	AP-42	0.00%	0.00%	0.01	0.01	0.06	0.06

	Div	ision fo	r Air Qı	uality					<b>DEP700</b>	)7N						
	DIV	151011 10	I All Q	uanty				Sourc	e Emissic	ons Profile			1	Additional I	Documentatior	1
	3	00 Sowe	r Bouleva	ard				Sectio	n N.1: Emiss	ion Summary						
	I	Frankfort	, KY 406	01				Section	n N.2: Stack	Information			Compl	ete DEP700	)7AI	
		(502) 5	564-3999					Sectio	n N.3: Fugiti	ve Information	1					
								Section	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	(AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: En	nission Su	ummar	y													
Emission	Emission	Process	Process		Control	Stack	Maximum Design	<b>D U</b> <i>i i</i>	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	ID ID	Control Stack Device ID Ca		Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential ( <i>lb/hr</i> )	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
EU03b	Nut Roaster #1 Vegetable Oil	EU03b	Nut Roster #1 Vegetable	N/A	N/A	E03-B	2.5	PM10	0.8	AP-42	0.00%	0.00%	2	2	8.76	8.76
								VOC	0.085	AP-42	0.00%	0.00%	0.21	0.21	0.93	0.93
1						1					1			1		

	Div	vision fo	or Air Qı	ıality					DEP700	)7N						
	DIV	131011 10		adiity				Sourc	e Emissio	ons Profile			1	Additional I	Documentation	ı
	3	300 Sowe	r Bouleva	ard				Sectio	n N.1: Emiss	sion Summary						
	]	Frankfort	, KY 406	01				Section	n N.2: Stack	Information			Compl	ete DEP700	)7AI	
		(502) 5	564-3999					Sectio	n N.3: Fugiti	ve Information	l					
								Section	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: En	nission S	ummar	У													
Emission	Emission	Process	Process			Stack	Maximum Design	<b>D U</b> <i>i i</i>	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	Control Stack	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
EU04	Ambient Air Cooler	EU04	Ambient Air Cooler			E04	2.5	PM10	0.26	AP-42			N/A	0.33	N/A	1.42
								PM2.5	0.078	AP-42			N/A	0.1	N/A	0.43

	Div	vision fo	or Air Qı	uolity					DEP700	7N						
	DIV	151011 10	n All Qi	uanty				Sourc	e Emissio	ons Profile				Additional I	Documentation	1
	3	300 Sowe	r Boulev	ard				Sectio	n N.1: Emiss	ion Summary						
	]	Frankfort	, KY 406	01				Sectio	n N.2: Stack	Information			Compl	ete DEP700	)7AI	
		(502) 5	564-3999					Sectio	n N.3: Fugiti	ve Information	ı					
								Sectio	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: En	nission S	ummar	у													
Emission	Emission	Process	Process		Control	Stack	Maximum Design	Dellectoret	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	Control Device ID Stack ID Ca Ca	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
EU05	Dry Pack Central Vacuum	EU05	Dry Pack Central Vacuum	Cyclone	CV-1	E05	0.0825	Particulates	2000	Manufacturer	99.90%	99.98%	165	0.04	722.7	0.18
				Filter	CV-2			PM10	2000	Manufacturer	99.90%	99.98%	165	0.04	722.7	0.18

	Div	vision fo	r Air Q	uality					DEP700	<b>7</b> N						
	DIV	151011 10	I All Q	uanty				Sourc	e Emissic	ons Profile			I	Additional I	Documentation	ı
	3	300 Sowe	r Boulev	ard				Section	n N.1: Emiss	ion Summary						
	I	Frankfort	, KY 406	01				Section	n N.2: Stack	Information			Compl	ete DEP700	07AI	
		(502) 5	564-3999					Section	n N.3: Fugiti	ve Information	1					
								Section	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	(AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: Er	nission Su	ummar	у													
Emission	Emission	Process	Process			Stack	Maximum Design	Dollutont	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	Device	ID	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
EU06	Nut Roaster #2	EU06	Indirect Heat Exchanger	N/A	N/A	E06	2.8	Particulates	7.6	AP-42	0.00%	0.00%	0.02	0.02	0.09	0.09
								Sulfur Dioxide	0.6	AP-42	0.00%	0.00%	0.002	0.002	0.01	0.01
								Nitrogen Oxides	100	AP-42	0.00%	0.00%	0.27	0.27	1.2	1.2
								Carbon Monoxide	84	AP-42	0.00%	0.00%	0.23	0.23	1.01	1.01
								Volatile Organic compounds	5.5	AP-42	0.00%	0.00%	0.02	0.02	0.07	0.07
															-	

	Div	rision fo	r Air Qı	ality					DEP700	)7N						
		131011 10		uanty				Sourc	e Emissio	ons Profile			I	Additional I	Documentatior	1
	3	00 Sowe	r Bouleva	ard				Sectio	n N.1: Emiss	sion Summary						
	I	Frankfort	, KY 406	01				Sectio	n N.2: Stack	Information			Compl	ete DEP700	)7AI	
		(502) 5	564-3999					Section	n N.3: Fugiti	ve Information	1					
								Section	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	AFS) #:			21-	035-000	31										
Permit #:	:				F-19-017	7										
Agency I	nterest (AI)	ID:			<u>509</u>											
Date:					9/6/2024											
N.1: En	nission Su	ummar	у													
Emission	Emission	Process	Process		Control	Stack	Maximum Design	<b>D U</b> <i>i i</i>	Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	Device ID	ID	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
EU07	Nut Roaster #2 Vegetable Oil	EU07	Nut Roster #1 Vegetable	Oil De- mister	F-1	E07	3.75	PM10	0.26	AP-42	99.90%	99.90%	0.49	0.0005	2.14	0.002
								VOC	0.085	AP-42	0.00%	0.00%	0.32	0.32	1.4	1.4
								PM2.5	0.31	AP-42	85.00%	85.00%	0.58	0.09	2.55	0.38

	Div	vision fo	or Air Qu	ality					<b>DEP70</b> 0	)7N						
	DIV	151011 10	ı Alı Qı	uanty				Sourc	e Emissio	ons Profile			1	Additional I	Documentatior	1
	3	300 Sowe	r Boulev	ard				Sectio	n N.1: Emiss	ion Summary						
	]	Frankfort	, KY 406	01				Sectio	n N.2: Stack	Information			Compl	ete DEP700	)7AI	
		(502) 5	564-3999					Sectio	n N.3: Fugiti	ve Information	1					
								Sectio	n N.4: Notes	, Comments, a	nd Explana	ations				
Source N	ame:				Kenlake	Foods										
KY EIS (	(AFS) #:			21-	035-000	31										
Permit #:					F-19-017	7										
Agency I	nterest (AI)	ID:			509											
Date:					9/6/2024											
N.1: En	nission S	ummar	У													
Emission	Emission	Process	Process		Control	Stack	Maximum Design		Uncontrolled Emission	Emission Factor Source	Capture	Control	Hourly E	missions	Annual E	missions
Unit #	Unit Name	ID	Name	Device Name	Device ID	ID	Capacity (SCC Units/hour)	Pollutant	Factor (lb/SCC Units)	(e.g. AP-42, Stack Test, Mass Balance)	Efficiency (%)	Efficiency (%)	Uncontrolled Potential ( <i>lb/hr</i> )	Controlled Potential ( <i>lb/hr</i> )	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
EU08	Ambient Air Cooler	EU08	Ambient Air Cooler	Mesh Pad Screen	F-2	E08	3.75	PM10	0.26	AP-42	99.90%	99.90%	0.49	0.0005	2.14	0.002
								PM2.5	0.31	AP-42	85.00%	85.00%	0.58	0.09	2.55	0.38

# Section N.2: Stack Information

## **UTM Zone:**

	Identify all Emission Units (with Process ID) and	St	ack Physical Da	ata	Stack UTM	Coordinates	Sta	ack Gas Stream Da	ata
Stack ID	Control Devices that Feed to Stack	Equivalent Diameter (fi)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	<b>Temperature</b> (°F)	Exit Velocity (ft/sec)
E01	BOILER #1 (EU01)	1	37.14				1120	150	24
E02	BOILER #2 (EU02)	1	36.93				1120	150	24
E03-A	Nut Roaster #1(EU03a)	1	38.34				693	120	15
Е03-В	Nut Roaster #1 Vegtable Oil (EU03b)	1	38.31				1200	86	10
E04	Ambient Air Cooler (EU04)	2.5	32.66				10600	75	36
E05	Dry Pack Central Vacuum System (EU05)	0.33	34.74				600	75	120
E06	Indirect Heat Exchanger (EU06)	1.67	37.33				1260	950	13.32
E07	Nut Roaster #2 (EU07)	1.33	37.25				1250	260	15
E08	Ambient Air Cooler (EU08)	2.5	33.25				21,560	120	73.3

### Section N.3: Fugitive Information **UTM Zone:** Area Physical Data **Area UTM Coordinates** Area Release Data **Emission Unit # Emission Unit Name Process ID** Length of the Y Release Release Length of the X Side Northing Easting Side Temperature Height (ft) (m) (m) (ft) (ft) (°F) N/A N/A N/A N/A N/A N/A N/A N/A N/A

Section N.4: Notes, Comments, and Explanations
N.2 - See Attached Facility Layout
Ambient Air Cooler EU04: 50% of emissions assigned to this unit. The remaining 50 % assigned to Nut Roaster #1. Emission factor used already includes controls, so no additional control efficiencies are added.

D	ivision for	: Air Q	uality				E <b>P7007(</b> rol Equip				Con		ditional De			iaabla
	200 5	D 1				Cont	ioi Equip	mem				nplete Section		-		
	300 Sower											ch manufactur		ations for e	each control c	levice
	Frankfort,										Con	nplete DEP70	00/AI			
	(502) 5	64-3999														
Source N	ame:		Kenlake Foods													
KY EIS (	AFS) #:	21-	035-00031													
Permit #:			F-19-017													
Agency I	nterest (AI)	) ID:	509													
Date:			9/6/2024													
Section G	GG.1: Gene	ral Info	rmation - Con	trol Equipn	nent											
Control Device ID	Control Device	Cost	Manufacturer	Model Name/	Date	Inlet	Gas Stream	Data For <u>All (</u>	Control Devices		Cone Afterb	Gas Stream Da densers, Adsor ourners, Incine Oxidizers <u>Only</u>	bers, rators,		nt Operation <u>ll</u> Control De	
#	Name	Cust	Manufacturer	Serial #	Installed	<b>Temperature</b> (°F)	Flowrate (scfm @ 68 °F)	Average Particle Diameter (µm)	Particle Density (lb/ft <sup>3</sup> ) or Specific Gravity	Gas Density (lb/ft <sup>3</sup> )	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in. H <sub>2</sub> O)	Pollutants Collected/ Controlled	Pollutant Removal (%)
CV-1	Dry Pack Central Vacuum	N/A	Lamson Blower	5155 O-AD 250 F Series	Mar-83	75	820	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Particulates	75
CV-2	Central Vaccum	N/A	Lamson Blower	5155 O-AD 250 F Series	Mar-83	75	820	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Particulates	99.9
F-1	Oil De-mister	N/A	ACS Industries	7CA / 38F	Jul-05	260	2,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PM>5;PM2.	99.9;85
F-2	Amolent Air Cooler Mesh Pad Screen	N/A	Air-Maze	P-5	Jul-05	120	21,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PM>5;PM2.	99.9;85
																,

Section GG.2:	Flare Source Information					
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	<b>Type of Flare</b> (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	N/A	N/A	N/A	N/A	N/A	N/A

Section	ı GG.3: Cyclone										
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Cyclone	Identify Number of Cyclones: Single <u>or</u> Multiple	<b>Identify Type:</b> High-Efficiency, Conventional, <u>or</u> 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)
CV-1	EU05	Single	Conventional	11.5	0.25	1.5	7	3	0.67	0.42	N/A

Section	GG.4: Electrostatic Pr	ecipitator (ESP	)										
Control Device ID #	Identify all Emission Units and Control Devices that Feed to ESP	<b>Identify Type:</b> Dry negative corona, Wet negative corona <u>or</u> 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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
					Par	<del>e 4 of 12</del>							

Section	n GG.5: Scrubb	er																
Control	Identify all Emission Units and Control	Identify Type of Scrubber: Venturi,	For Venturi Scrubbers:	For Pac Scrul	eked Bed bbers:	For Spra	y Towers:	Identify Type of Flow:	Direction	Cross- Sectional	Venturi Throat	М	list Eliminat	or		Scru	bbing Liqui	1
Device ID #	Devices that Feed to Scrubber	Packed Bed, Spray Tower, <u>or</u> Other (specify)	Identify Throat Type: Fixed <u>or</u> Adjustable	Identify Packing Type	Packing Height (in)	Number of Nozzles	Nozzle Pressure (psig)	Concurrent, Countercurrent, <u>or</u> Crossflow	of Gas Flow (ft)	Area (ft <sup>2</sup> )	Velocity (ft/s)	<b>Identify</b> <b>Type:</b> Mesh <u>or</u> Vane	Cross- Sectional Area (ft <sup>2</sup> )	Pressure Drop (in. H <sub>2</sub> O)	Chemical Composition	Flowrate (gal/min)	Fresh Liquid Makeup Rate (gal/min)	Describe Disposal Method of Scrubber Effluent
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section G	G.6: Filter													
Control	Identify all Emission Units and Control	Identify Type of Filter Unit:	Identify Type of Filtering Material:	Total Filter Area	Effective Air-to-	Continuous Monitoring	Introduced in Sys	l Materials nto the Control stem e, carbon)	Identify Cleaning Method:	Identify Gas Cooling Method: Ductwork, Heat		ictwork:	For Bleed- in Air:	For Water Spray:
Device ID #	Devices that Feed to Filter	Baghouse, Cartridge Collector, or Other (specify)	Fabric, Paper, Synthetic, or Other (specify)	(ft <sup>2</sup> )	Filter Ratio (acfm/ft <sup>2</sup> )	Instrumentation (e.g. COMS, BLDS, none)	Material	Injection Rate (lb/hr)	Shaker, Pulse Air, Reverse Air, Pulse Jet, or Other (specify)	Exchanger, Bleed-in Air, Water Spray, or Other (specify)	Length (ft)	Diameter (ft)	Flowrate (scfm @ 68°F)	Flowrate (gal/min)
	FUE			149	NUA	NIA	NUA	NUA		N/A	N/A	NU	820	N/4
CV-2	EU05	Centrifugal Separator	Polyester	148	N/A	N/A	N/A	N/A	Pulse Air	N/A	N/A	N/A	820	N/A
F-1	EU07	Passive Filter	Wire Mesh	288	N/A	N/A	N/A	N/A	Remove, Shake, soak in caustic, and rinse	N/A	N/A	N/A	2000	N/A
F-2	EU08	Passive Filter	Wire Mesh	1050	N/A	N/A	N/A	N/A	Remove, Shake, soak in caustic, and rinse	N/A	N/A	N/A	21,500	N/A

Section	n GG.7: Afterburne	r/Inciner	ator/O	kidizer													
Control	Identify all Emission Units and Control	Identify Type:	Number		Dimensions of	Residence	Combustion Chamber	Type of	Type of Heat			1	Auxiliary Fu	ıel			Composition and Quantities
Device ID #	Devices that Feed to Afterburner/Incinerator/ Oxidizer	Afterburner, Incinerator, Oxidizer, <u>or</u> Other (specify)	of Burners	Rating (BTU/hr)	Combustion Chamber (specify units)	Time (sec)	Temperature (°F)	Catalyst (if applicable)	Exchanger (if applicable)	Identify Fuel Type	Higher Heating Value (MMBtu/scf)	Hourly Fuel Usage (scf/hr)	% Sulfur (Maximum)	% Sulfur (Average)	% Ash (Maximum)	% Ash (Average)	of Combusted Waste
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sectior	ı GG.8: Adsorber										
Control	Identify all Emission Units and Control	Identify	Identify Adsorbent: Activated carbon, Activated alumina,	Iumina,         Cross-         Weight of           Zeolite, or         Direction of Gas         Sectional         Adsorbent         Number of					Regeneration	Method of Regeneration: Alternate Use of Beds,	Time On-line Before
Device ID #	Devices that Feed to Adsorber	Adsorbate	Silica Gel, Synthetic Polymers, Zeolite, <u>or</u> Other (specify)				Number of Beds	Replacement, Steam, <u>or</u> Other (specify)	Time (minutes)	Source Shutdown, <u>or</u> Other (specify)	<b>Regeneration</b> (minutes)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section G	G.9: Condenser									
Control Device ID #	Identify all Emission Units and Control Devices that Feed to	Identify Type of Condenser: Spray Tower, Jet Ejector, Barometric, Single- Pass Shell-and-Tube, <u>or</u> Multi-Pass Shell-and-	Identify Type of Coolant: Water, Brine, Liquid Nitrogen,	Coolant To	emperature	Flowrate	Coolant Gas Flowrate	Condensing Surface Area	Outlet Gas Temperature	Outlet Gas Composition
Device ID #	Condenser	Tube (if multi-pass, indicate number of passes)	CFC/HFC, or Other (specify)	Inlet (°F)	Outlet (°F)	(gpm)	(scfm @ 68 ° F)	(specify units)	(°F)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L	l									<u> </u>

#### Section GG.10: Selective Catalytic Reduction (SCR) / Selective Non-catalytic Reduction (SNCR) SCR Only Design Reagent Temperature Maximum **Identify all Emission** Catalyst Range Control **Injection Grid** Design **Units and Control** Туре Gas **Injection Rate** Device Design Ammonia **Devices that Feed to** (SCR/SNCR) Composition Slip ID # (e.g. honeycomb) Туре Replacement SCR/SNCR Min Max Volume Weight Composition (ppm) Max Schedule (°F) (°F) Min $(ft^3)$ (lb) (lb/hr) (lb/hr) N/A N/A

Section	GG.11: Other Control Equipmen	t
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)
N/A	N/A	N/A

Section GG.12: Notes, Comments, and Explanations

				<b>DEP</b> 7	7007V	Addi	tional Documentation
Divis	sion for Air Quali	ity Ap	plicable	Requirem	nents and Complian	nce	
				Activ	vities	C	omplete DEP7007AI
30	0 Sower Boulevard		Section	on V.1: Emis	sion and Operating Limi	tation(s)	
F	rankfort, KY 40601		Section	on V.2: Moni	toring Requirements		
	(502) 564-3999		Section	on V.3: Reco	rdkeeping Requirements		
			Section	on V.4: Repo	rting Requirements		
			Section	on V.5: Testi	ng Requirements		
			Section	on V.6: Notes	s, Comments, and Explan	nations	
Source Nar	ne: Kenlak	e Foods					
KY EIS (A	· · · · · · · · · · · · · · · · · · ·						
Permit #:	F-19-01						
Agency Int	erest (AI) ID:	509					
Date:	9/6/202						
Section V	1.1: Emission and	d Operating Li	nitation(s	5)			
Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	<b>Voluntary Emission</b> <b>Limit or Exemption</b> (if applicable)	<b>Operating</b> <b>Requirement or</b> <b>Limitation</b> (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EU10	Emergency Generator	40 CFR 63 Subpart ZZZZ	N/A		63.6625(f) Install non- resettable hour meter		Visual Inspection
		40 CFR 63 Subpart ZZZZ			tenance and readiness testing li		Hour meter and maintenance logs.
	1	1					

Section V	Section V.2: Monitoring Requirements											
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring							
EU10	Emergency Generator	N/A	N/A	N/A	N/A							

Section V.	Section V.3: Recordkeeping Requirements											
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping							
EU10	Emergency Generator	N/A	40 CFR 63 Subpart ZZZZ, 63.6603(a) Change oil every 500 operating hours or annually.	Operating Hours	Electronic work orders/maintenance records							
			40 CFR 63 Subpart ZZZZ, 63.6603(a) Inspect Air cleaner and Spark plugs every 1000 operating hours or annually.	Operating Hours	Electronic work orders/maintenance records							
			40 CFR 63 Subpart ZZZZ, 63.6603(a) Inspect hoses and belts every 500 operating hours or annually.	Operating Hours	Electronic work orders/maintenance records							
			40 CFR 63 Subpart ZZZZ, 63.6655(e) Keep records of maintenance.	Maintenance Records	Electronic work orders/maintenance records							
			40 CFR 63 Subpart ZZZZ, 63.6625(e) Maintain and operate according to manufacturer's instructions.	Maintenance Records	Electronic work orders/maintenance records, keep copy of manufacturer's instructions							

Section V	ection V.4: Reporting Requirements											
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting							
EU10	Emergency Generator	N/A	N/A	N/A	N/A							

Section V	.5: Testing Req	luirements			
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
EU10	Emergency Generator	N/A	N/A	N/A	N/A

Section V.6: Notes, Comments, and Explanations	

Division for Air Quality				I	DEP70071	Additional Documentation         Complete DEP7007AI, DEP7007N,				
				Internal	Combustio					
300 So	300 Sower Boulevard			Section E	E.1: General In	formation		DEP7007V, and	1 DEP7007GG	
Frankf	ort, KY 40601			Section E	E.2: Operating	Information		Attach EP	A certification	of the engine
(502	2) 564-3999				E.3: Design Inf					or the engine
					E.4: Fuel Inform					
					E.5: Emission I					
				Section E	E.6: Notes, Cor	mments, and	Explanations			
Source Name:		Kenlake Foo	ds							
KY EIS (AFS) #:	21-	035-00031								
Permit #:		F-19-017								
Agency Interest (A	AI) ID:	509								
Date:		9/6/2024								
Section EE.1: G	eneral Infor	mation			_			_	_	_
Emission Unit #	Emission Unit Name	Control Device ID	Stack ID	Manufacturer	Model Number	Model Year	Date of Manufacture	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Date Reconstructed/ Modified	List Applicable Regulations
EU10	Emergency Generator	N/A	N/A	Kohler	11-RMY	2002	2002	12/2002	N/A	40 CFR 63 Subpart ZZZZ
	Generator	11/21	11/11	Komer	11-101911	2002	2002	12/2002	11/11	Subpart EDEL

### DEP7007EE

Emission Unit #	Emission Unit Name	Control Device ID	Stack ID	Manufacturer	Model Number	Model Year	Date of Manufacture	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Date	List Applicable Regulations
-----------------	-----------------------	----------------------	----------	--------------	--------------	------------	------------------------	---	------	--------------------------------

Section EE.2	ection EE.2: Operating Information												
Emission Unit #	Engine Purpose (Identify if Non-Emergency, Emergency,Fire/Water Pump, Black-start engine for combustion turbine, Engine Testing)	Hours Operated	Is this engine a rental? (Yes/No)	Rental Time Period (hrs)	Alternate Operating Scenarios (Describe any operating scenarios in which the engine may be used in a different configuration)								
EU10	Emergency	<24/yr	No	N/A	N/A								

	<b>Design Information</b>						
Emission Unit #	<b>Engine Type</b> (Identify all that apply: Commercial, Institutional, Stationary, Non-Road)	Ignition Type (Identify if either Compression or Spark Ignition)	Engine Family (Identify all that apply: 2- stroke, 4-stroke, Rich Burn, Lean Burn)	Maximum Engine Power (bhp)	Maximum Engine Speed (rpm)	Total Displacement (L)	Number of Cylinders
EU10	Stationary	Spark Ignition	N/A	1.01	3600	0.725	2

Section EE.4	: Fuel Informat	ion							
Emission Unit #	Identify if Primary, Secondary, or Tertiary Fuel	<b>Fuel Type</b> (Identify if Diesel, Gasoline, Natural Gas, Liquefied Petroleum Gas (LPG), Landfill/Digester Gas, or Other)	Fuel Grade	Percent Time Used (%)	Maximum Fuel Consumption	Heat Content	Sulfur Content (%)	SCC Code	SCC Units
EU10	Primary	Natural Gas	N/A	N/A	N/A	1021 BTU/scf	N/A	20200202	MMCF

## Section EE.5: Emission Factor Information

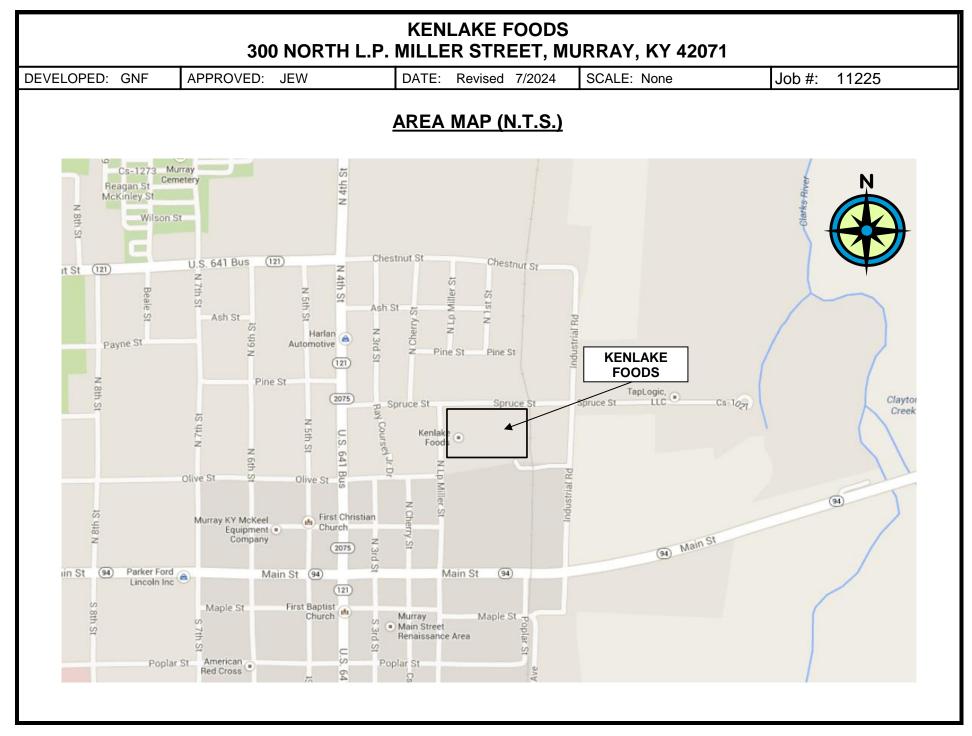
Emission factors expressed here are based on the potential to emit.

Emission Unit #	Fuel	Pollutant	Emission Factor	Emission Factor Units	Source of Emission Factor
EU10	Natural Gas	Particulates	0.002	lbs/hr	AP 42
		Sulfur Dioxide	0.001	lbs/hr	AP 42
		Sunui Dioxide	0.001	105/111	Ar 42
		Nitrogen Oxides	0.8	lbs/hr	AP 42
		Carbon Monoxide	0.11	lbs/hr	AP 42
		Volatile Organic Compounds	0.02	lbs/hr	AP 42
		Volatile Organic Compounds	0.02	105/111	Ar 42

Section EE.6: Notes, Comments, and Explanations				

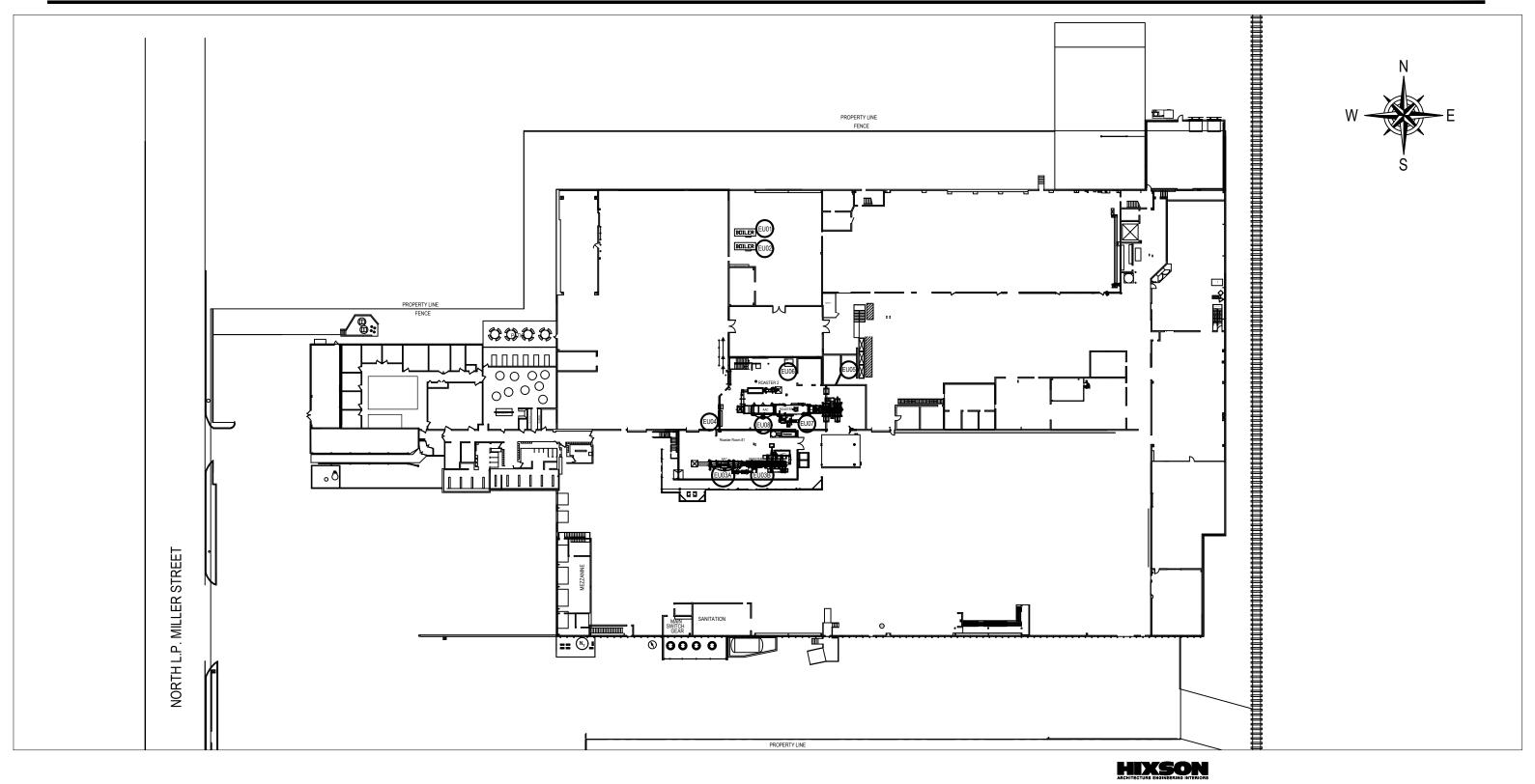
Division	for Air Quality	D	EP7007DD			
300 Sower Boulevard		Insignificant Activities				
Frankfort, KY 40601		1	.1: Table of Insignificant Act	tivities		
(502	) 564-3999	Section DD	.2: Signature Block			
<b>I</b>		Section DD	.3: Notes, Comments, and Ex	xplanations		
Source Name:		Kenlake Foods				
KY EIS (AFS) #	: 21-	035-00031				
Permit #:		F-19-017				
Agency Interest	(AI) ID:	509		· · · · · · · · · · · · · · · · · · ·		
Date:		9/6/2024		· · · · · · · · · · · · · · · · · · ·		
			· · · · · · · · · · · · · · · · · · ·			
	Table of Insignifica					
*Identify each activ	vity with a unique Insignif	icant Activity number (IA #); for exa	ample: 1, 2, 3 etc.			
Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions		
AI01	Water Heater 275,000 BTU/hr		KDPE List of insignificant activities #11	See Attached		
AI02	Water Heater 600,000 BTU/hr		KDPE List of insignificant activities #11	See Attached		
AI03	Make-up Air System 1,720,000 BTU/hr		KDPE List of insignificant activities #15	See Attached		
AI04	up Air System 1,103,000 BYU/hr		KDPE List of insignificant activities #15	See Attached		
AI05	Bulk Sugar Receiving			See Attached		
AI06	Sugar Transfer System	_	ge 1 of 2	See Attached		

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions			
AI07	Emergency Generator		401 KAR 52:050, Section 17; KDPE List of insignificant activities #26;	See Attached			
Mor	Energency Generator		morganiteant detricted #20;				
				•			
Section DD.2: 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.							
		JEMM		9/6/24			
Ву:		✓ Authorized Signature		Date			
		Justin Menees	•	Site Leader			
Type/Print Name of Siguatory Title of Siguatory							



HIXSON

CLIENT:	KENLAKE FOODS	JOB NO:
	KENLAKE FOODS AIR PERMIT RENEWAL	DRAWN BY:
PROJECT:		DATE:
LOCATION:	MURRAY, KY	REVISION NO:
	,	REVISION DATE:
SKETCH TITLE:	KENLAKE FLOOR PLAN	SKETCH FILE PATH:



1122	25
------	----

GNF

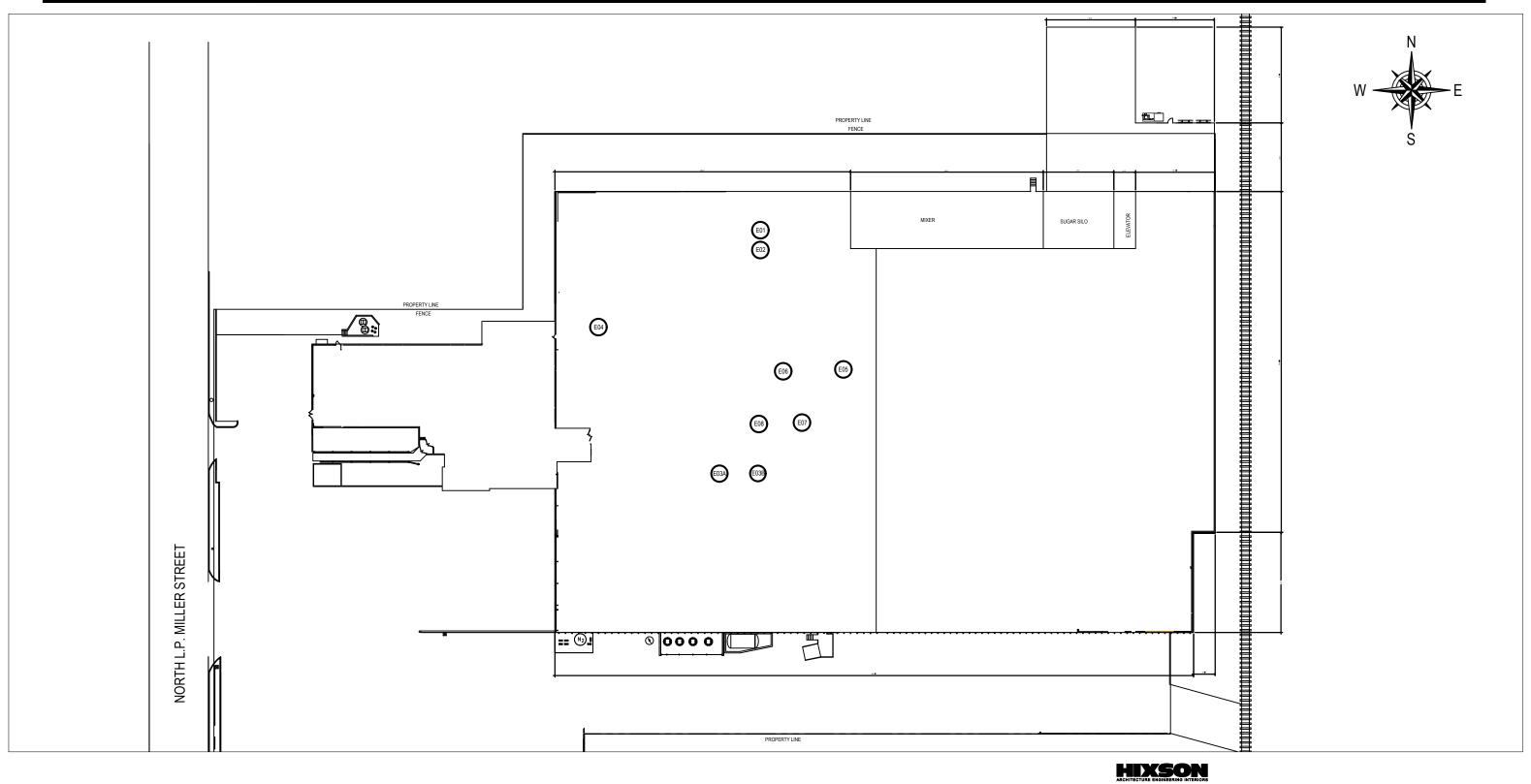
08/28/2024

H:\00112250\enviro\Air Pollution\AP Permit Renewal





CLIENT:	KENLAKE FOODS	JOB NO:
	KENLAKE FOODS AIR PERMIT RENEWAL	DRAWN BY:
PROJECT:		DATE:
LOCATION:	MURRAY, KY	<b>REVISION NO:</b>
	;	REVISION DATE:
SKETCH TIT	LE: KENLAKE ROOF PLAN	SKETCH FILE PATH



11225

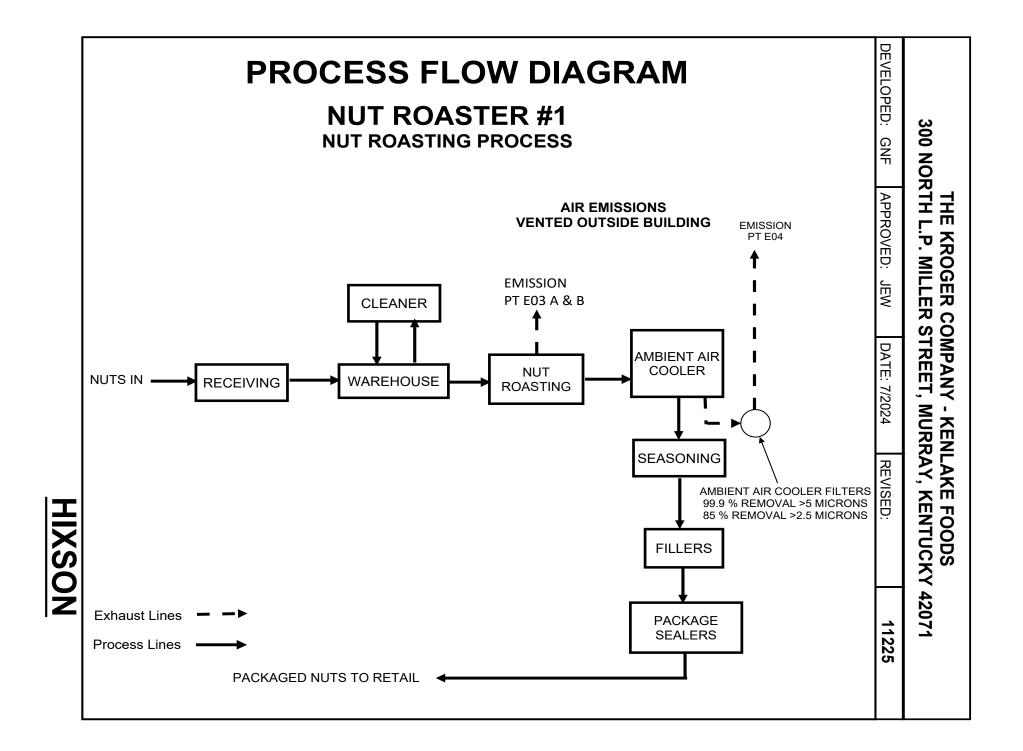
GNF

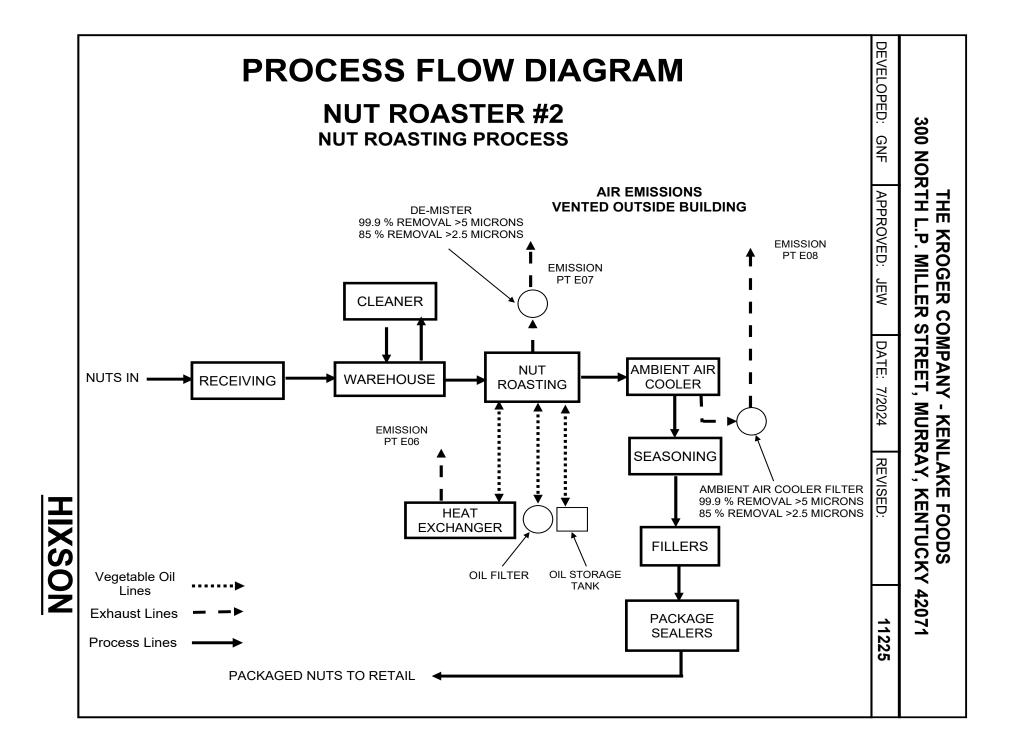
08/28/2024

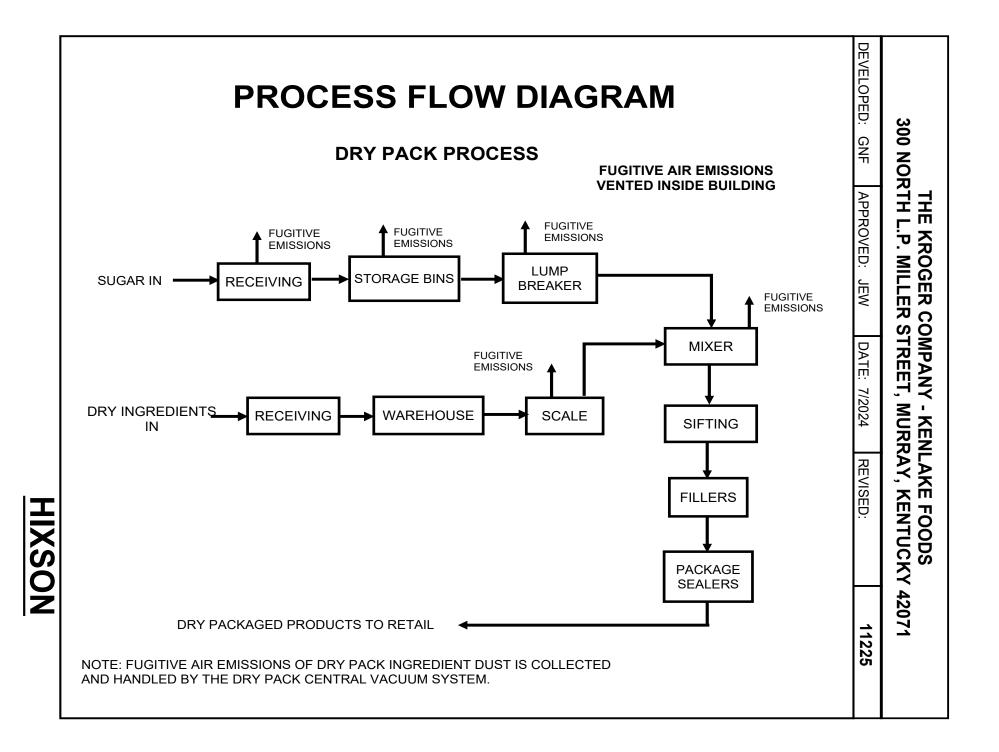
SKETCH NO:

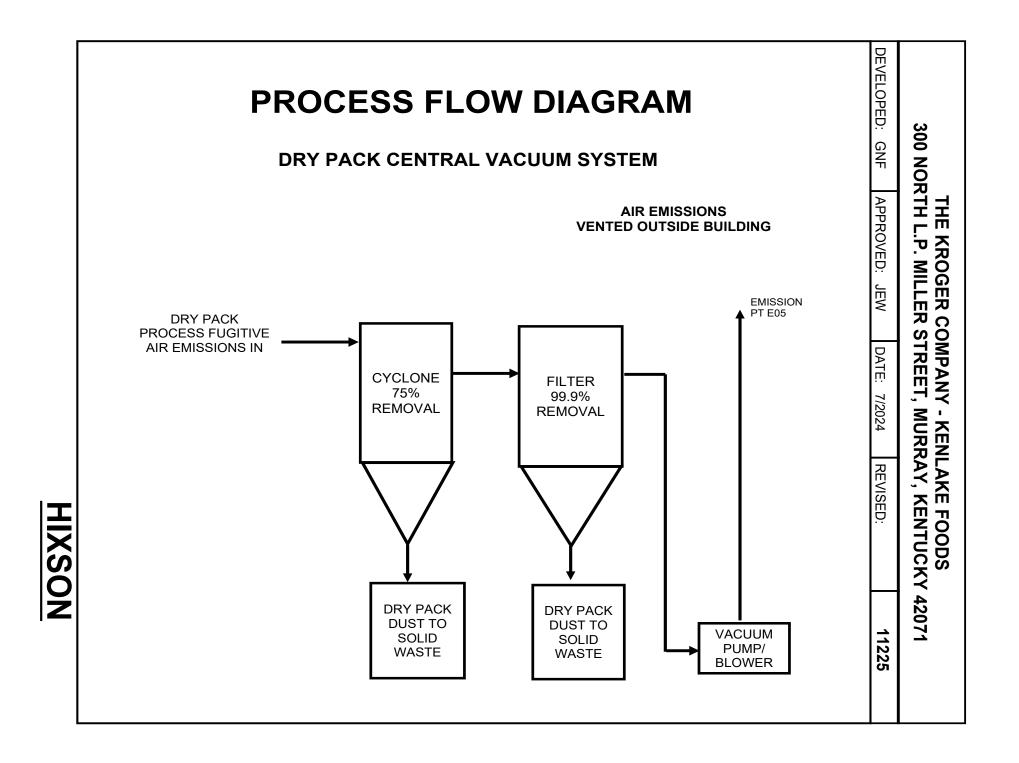


### H: H:\00112250\enviro\Air Pollution\AP Permit Renewal









INPUT CALCULATION	1															ATI, OH (513		
				9	CONTRO	LLED EMIS	SSION TO	TALS										
FACILITY					KENL	AKE FOODS										DATE:	July	2024
SOURCE																JOB #:	44	225
SUUNCE					FL											JUB #.		220
	POLLUTANTS																	
	OLLOTANIO				SIGN	IFICANT ACT	IVITIES						INSIG	NIFICANT	ACTIVITIES	6		
CONTROLI	ED EMISSIONS	EU 01	EU 02	EU 03 - Nut	Roaster #1	EU 04	EU 05	EU 06	EU 07	EU 08					Sugar	WATER H	IEATERS	
		Boiler #1	Boiler #2	NATURAL GAS	VEG. OIL	Nut Roaster #1 Air Cooler	Dry Pack Central Vac	Heat Exchanger	Nut Roaster #2	Nut Roaster #2 Air Cooler	MECHANICAL ROOM AIR	CLAMSHELL LINE AIR	Emergency Generator	Bulk Sugar Receiving	Transfer System	#1 & #2	#3	TOTALS
PARTICUL	ATES	Dolici #1	Dolici #2	ano	VEG. OIL	All Cooler	Ochinal Vac	Excitatiget	#2		ROOMAR		Generator	riccerving	Oystein			1017120
	Hourly, (lbs/hr)	0.03	0.03	0.00	2.00	0.05	0.04	0.02	0.07	0.07	0.01	0.01	0.00	1.05	0.42	0.01	0.00	
	Daily, (lbs/day)	0.74	0.74	0.09	48.00	1.18		0.50	1.77	1.77	0.31	0.20	0.03	25.20	10.08	0.21	0.05	
	Annual, (tons/year)	0.14	0.14	0.02	8.76	0.21	0.18	0.09	0.32	0.32	0.06	0.04	0.00	4.60	1.84	0.04	0.01	16.76
PARTICUL	ATES (PM10)																	
	Hourly, (lbs/hr)	0.00	0.00	0.00	0.00	0.0003	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Daily, (lbs/day) Annual, (tons/year)	0.00	0.00	0.00	0.00	0.01	0.99	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	ATES (PM2.5)	0.00	0.00	0.00	0.00	0.001	0.16	0.00	0.002	0.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
FARICOL	Hourly, (lbs/hr)	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	Daily, (lbs/day)	0.00	0.00	0.00	0.00	1.17	0.00	0.00	1.76	1.76		0.00	0.00	0.00	0.00	0.00	0.00	
	Annual, (tons/year)	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SULFUR D	ÖXIDE																	
	Hourly, (lbs/hr)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	
	Daily, (lbs/day)	0.06	0.06	0.01	0.00	0.00		0.04	0.00			0.02	0.00	0.00	0.00		0.00	
	Annual, (tons/year)	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
NITROGEN		0.41	0.41	0.05	0.00	0.00	0.00	0.27	0.00	0.00	0.17	0.11	0.80	0.00	0.00	0.06	0.03	1
	Hourly, (lbs/hr) Daily, (lbs/day)	9.75	9.75	0.05	0.00	0.00	0.00	6.59	0.00	0.00	4.04	2.59	0.80	0.00	0.00	0.06	0.03	2.30 47.98
	Annual, (tons/year)	9.75	9.75	0.22	0.00	0.00	0.00	1.20	0.00	0.00	0.74	0.47	0.01	0.00	0.00	0.26	0.03	
CARBON M		1.70	1.70	0.22	0.00	0.00	0.00	1.20	0.00	0.00	0.74	0.47	0.01	0.00	0.00	0.20	0.12	+ <del>0.00</del>
	Hourly, (lbs/hr)	0.34	0.34	0.04	0.00	0.00	0.00	0.23	0.00	0.00	0.14	0.09	0.11	0.00	0.00	0.10	0.02	1.42
	Daily, (lbs/day)	8.19	8.19	1.02	0.00	0.00		5.53	0.00	0.00	3.40	2.18	1.64	0.00	0.00	2.37	0.54	33.06
	Annual, (tons/year)	1.49	1.49	0.19	0.00	0.00	0.00	1.01	0.00	0.00	0.62	0.40	0.00	0.00	0.00	0.43	0.10	5.74
VOLATILE	ORGANIC COMPS																	
	Hourly, (lbs/hr)	0.02	0.02	0.00	0.21	0.00		0.02	0.32	0.00		0.01	0.02	0.00	0.00	0.01	0.00	
	Daily, (lbs/day)	0.54	0.54	0.07	5.10	0.00	0.00	0.36	7.65	0.00	0.22	0.14	0.35	0.00	0.00	0.16	0.04	15.15
	Annual, (tons/year)	0.10	0.10	0.01	0.93	0.00	0.00	0.07	1.40	0.00	0.04	0.03	0.00	0.00	0.00	0.03	0.01	2.70

INPUT CALCULATION CINCINNATI, OH (513) 241-1230 NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR) FACILITY: **KENLAKE FOODS** DATE: July 2024 SOURCE: EU 01 - Boiler #1 JOB #: 11225 CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS? POTENTIAL (NOTE: POTENTIAL EMISSIONS CALCULATED AUTOMATICALLY BY ENTERING RATED BTU/HR CAPACITY.) FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS): (@ 1021 BTU/FT^3) MAX RATED HEAT INPUT CAPACITY 4.148.000 BTU/HR 35,589,109 FT^3/YR 4.063 FT^3/HR 97.504 FT^3/DAY NATURAL GAS CONSUMPTION NOTE: NATURAL GAS IS PRIMARY FUEL. COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS): COMBUSTION RATIO (CR) = 10.58 FT^3/FT^3 11.73 FT^3/FT^3 COMBUSTION PRODUCTS (PC) = 0.25 (OR 25%) EXCESS AIR (EA) = 0.33 FT 0.09 FT^2 AREA (A)= STACK DIAMETER (D) = STACK TEMPERATURE (Tf) = 150 F STACK FLOW RATE = 1.120 ACFM STACK FLOW RATE (ACFM) = ((GC (GAL/HR) / 60) \* (PC + (CR \* EA))) \* ((460 + Tf) / 530) STACK VELOCITY = 218 IFT/SEC STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN) COMBUSTION EMISSIONS: (PER AP-42 NATURAL GAS EMISSION FACTORS) (LBS/10<sup>6</sup> FT<sup>3</sup> GAS USED) POTENTIAL HOURLY POTENTIAL DAILY POTENTIAL ANNUAL (LBS/HR) (LBS/DAY) (LBS/YR) (TPY) PARTICULATES (7.6 LBS/10^6 FT^3 GAS) 0.03 0.74 270.48 0.14 SULFUR DIOXIDE 0.00 0.06 21.35 0.01 (0.6 LBS/10^6 FT^3 GAS) NITROGEN OXIDES 0.41 9.75 3558.91 1.78 (100 LBS/10^6 FT^3 GAS) CARBON MONOXIDE 0.34 8.19 2989.49 1.49 (84 LBS/10^6 FT^3 GAS) VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS) 0.02 0.54 195.74 0.10

INPUT CALCULATION CINCINNATI, OH (513) 241-1230 NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR) FACILITY: **KENLAKE FOODS** DATE: July 2024 SOURCE: EU 02 -Boiler #2 JOB #: 11225 CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS? POTENTIAL (NOTE: POTENTIAL EMISSIONS CALCULATED AUTOMATICALLY BY ENTERING RATED BTU/HR CAPACITY.) FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS): (@ 1021 BTU/FT^3) MAX RATED HEAT INPUT CAPACITY 4.148.000 BTU/HR 35,589,109 FT^3/YR 4.063 FT^3/HR 97.504 FT^3/DAY NATURAL GAS CONSUMPTION NOTE: NATURAL GAS IS PRIMARY FUEL. COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS): COMBUSTION RATIO (CR) = 10.58 FT^3/FT^3 11.73 FT^3/FT^3 COMBUSTION PRODUCTS (PC) = 0.25 (OR 25%) EXCESS AIR (EA) = 0.33 FT 0.09 FT^2 AREA (A)= STACK DIAMETER (D) = STACK TEMPERATURE (Tf) = 150 F STACK FLOW RATE = 1.120 ACFM STACK FLOW RATE (ACFM) = ((GC (GAL/HR) / 60) \* (PC + (CR \* EA))) \* ((460 + Tf) / 530) STACK VELOCITY = 218 IFT/SEC STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN) COMBUSTION EMISSIONS: (PER AP-42 NATURAL GAS EMISSION FACTORS) (LBS/10<sup>6</sup> FT<sup>3</sup> GAS USED) POTENTIAL HOURLY POTENTIAL DAILY POTENTIAL ANNUAL (LBS/HR) (LBS/DAY) (LBS/YR) (TPY) PARTICULATES (7.6 LBS/10^6 FT^3 GAS) 0.03 0.74 270.48 0.14 SULFUR DIOXIDE 0.00 0.06 21.35 0.01 (0.6 LBS/10^6 FT^3 GAS) NITROGEN OXIDES 0.41 9.75 3558.91 1.78 (100 LBS/10^6 FT^3 GAS) CARBON MONOXIDE 0.34 8.19 2989.49 1.49 (84 LBS/10^6 FT^3 GAS) VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS) 0.02 0.54 195.74 0.10

INPUT CALCULATION					NATI, OH (513) 2	41-1230					
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)											
FACILITY:       KENLAKE FOODS       DATE:       July 2024         SOURCE:       EU01 & EU 02 - BOILERS 1 and 2       JOB #:       11225        CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS?       POTENTIAL         (NOTE: POTENTIAL EMISSIONS CALCULATED AUTOMATICALLY BY ENTERING RATED BTU/HR CAPACITY.)         FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES         TOTAL FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS):         MAX RATED HEAT INPUT CAPACITY       8,296,000         BTU/HR       (@ 1021 BTU/FT^3)											
NATURAL GAS CONSUMPTION NOTE: NATURAL GAS IS PRIM		FT^3/HR	195,009	FT^3/DAY	71,178,217	FT^3/YR					
COMBUSTION EMISSIONS: (LBS/10^6 FT^3 GAS USED)	(PER AP-4	2 NATURAL G	AS EMISSI	ON FACTO	RS)	ANNUAL					
	(LE	3S/HR)	(LBS/	DAY)	(LBS/YR)	(TPY)					
PARTICULATES (7.6 LBS/10^6 FT^3 GAS)		0.06		1.48	540.95	0.27					
SULFUR DIOXIDE (0.6 LBS/10^6 FT^3 GAS)		0.00		0.12	42.71	0.02					
NITROGEN OXIDES (100 LBS/10^6 FT^3 GAS)		0.81		19.50	7117.82	3.56					
CARBON MONOXIDE (84 LBS/10^6 FT^3 GAS)		0.68		16.38	5978.97	2.99					
VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS)		0.04		1.07	391.48	0.20					

INPUT ALCULATION					IATI, OH (513)						
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)											
ACILITY: KENLAKE FOODS DATE: July 2024											
SOURCE:		U02 - BOILE			1225						
_			L" OR "POTENTIAL" EI		ENTIAL						
			OMATICALLY BY ENTERING		Ύ.)						
FOR ACTUAL EN	MISSIONS, I	ENTER ACTUAL	/ ESTIMATED FUEL USAGE	ES							
FUEL CONSUMPTION											
MAX RATED HEAT INF			8,296,000	BTU/HR (@ 1021 E	STU/FT^3)						
NATURAL GAS CONSU			8,125 FT^3/HR	195,009 FT^3/DAY		FT^3/YR					
NOTE: NATURAL G			<u>.</u>								
			_								
COMBUSTION EMISSI	ONS:		(PER AP-42 NATURAL	GAS EMISSION FAC	TORS)						
PARAMETERS EMISSION POTENTIAL HOURLY POTENTIAL DAILY POTENTIAL ANNUAL											
HAPS	FACTOR										
	(LB/10^6	/	(LBS/HR)	(LBS/DAY)	(LBS/YR)	(TPY)					
2-Methylnaphthalene		2.40E-05	0.0000	0.0000	0.0017	0.00					
3-Methylchloranthrene	<	1.80E-06	0.0000	0.0000	0.0001	0.00					
7,12-Dimethylbenz	<	1.60E-05	0.0000	0.0000	0.0011	0.00					
Acenaphthene	<	1.80E-06	0.0000	0.0000	0.0001	0.00					
Acenaphthylene	< <	1.80E-06 2.40E-06	0.0000	0.0000	0.0001	0.00					
Anthracene Benz(a)anthracene	<	2.40E-06 1.80E-06	0.0000	0.0000	0.0002	0.00					
Benzene		2.10E-03	0.0000	0.0004	0.0001	0.00					
Benzo(a)pyrene	<	1.20E-06	0.0000	0.0000	0.0001	0.00					
Benzo(b)fluoranthene	<	1.80E-06	0.0000	0.0000	0.0001	0.00					
Benzo(g,h,i)perylene	<	1.20E-06	0.0000	0.0000	0.0001	0.00					
Benzo(k)fluoranthene	<	1.80E-06	0.0000	0.0000	0.0001	0.00					
Butane		2.10E+00	0.0171	0.4095	149.4743	0.07					
Chrysene	<	1.80E-06	0.0000	0.0000	0.0001	0.00					
Dibenzo(a,h)anthracene	<	1.20E-06	0.0000	0.0000	0.0001	0.00					
Dichlorobenzene		3.10E+00	0.0252	0.6045	220.6525	0.11					
Ethane		2.80E-06	0.0000	0.0000	0.0002	0.00					
Fluoranthene		1.80E+00	0.0146	0.3510	128.1208	0.06					
Formaldehyde		6.10E-04	0.0000	0.0001	0.0434	0.00					
Indeno(1,2,3-cd)pyrene		1.70E-05	0.0000	0.0000	0.0012	0.00					
Pentane		1.60E+00	0.0130	0.3120	113.8851	0.06					
Propane		5.00E-06	0.0000	0.0000	0.0004	0.00					
Toluene		3.40E-03	0.0000	0.0007	0.2420	0.00					
Total			0.0699	1.6783	612.5735	0.31					

INPUT CALCULATION CINCINNATI, OH (513) 241-1230 NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR) FACILITY: **KENLAKE FOODS** DATE: July 2024 SOURCE: EU 03 - NUT ROASTER #1 JOB #: 11225 CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS? POTENTIAL (NOTE: POTENTIAL EMISSIONS CALCULATED AUTOMATICALLY BY ENTERING RATED BTU/HR CAPACITY.) FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS): MAX RATED HEAT INPUT CAPACITY 2.700.000 BTU/HR (@ 1021 BTU/FT^3) 12,122 FT^3/DAY NATURAL GAS CONSUMPTION 505 FT^3/HR 4.424.590 FT^3/YR NATURAL GAS CONSUMPTION **4,100** HRS/YEAR 17 % 26.027 MCF/YR NOTE: NATURAL GAS IS PRIMARY FUEL. COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS): 10.58 FT^3/FT^3 COMBUSTION RATIO (CR) = 11.73 FT^3/FT^3 COMBUSTION PRODUCTS (PC) = EXCESS AIR (EA) = 0.25 (OR 25%) 1.00 FT 0.79 FT^2 STACK DIAMETER (D) = AREA (A)= 120 F STACK TEMPERATURE (Tf) = STACK FLOW RATE = 132 ACFM STACK FLOW RATE (ACFM) = ((GC (GAL/HR) / 60) \* (PC + (CR \* EA))) \* ((460 + Tf) / 530) STACK VELOCITY = 3 IFT/SEC STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN) (PER AP-42 NATURAL GAS EMISSION FACTORS) COMBUSTION EMISSIONS: (LBS/10<sup>6</sup> FT<sup>3</sup> GAS USED) POTENTIAL HOURLY POTENTIAL DAILY POTENTIAL ANNUAL (LBS/HR) (LBS/DAY) (LBS/YR) (TPY) PARTICULATES 0.00 0.09 33.63 0.02 (7.6 LBS/10^6 FT^3 GAS) SULFUR DIOXIDE 0.00 0.01 2.65 0.00 (0.6 LBS/10^6 FT^3 GAS) NITROGEN OXIDES 0.05 1.21 442.46 0.22 (100 LBS/10^6 FT^3 GAS) CARBON MONOXIDE 0.04 1.02 371.67 0.19 (84 LBS/10^6 FT^3 GAS) VOLATILE ORGANIC COMPS 0.00 0.07 24.34 (5.5 LBS/10^6 FT^3 GAS) 0.01

INPUT CALCULATION						NATI, OH (513) 2	41-1230
CALCOLATION					CINCINI	VATI, OF (515) 2	41-1230
	<u>NL</u>	IT ROASTI	NG - DEEP	FAT FRY	<u>′ING</u>		
FACILITY:	KENLA	KE FOODS		DATE:	Jul	y 2024	
SOURCE:				JOB #:		1225	
	CALCULATE "ACT						
	ENTIAL EMISSIONS CALC R ACTUAL EMISSIONS, EN				ATED BTU/HR	CAPACITY.)	
•	ING CAPACITY:	ſ	<b>-</b> 000				
	DASTING RATE:			LBS/HR			
NUT ROAST	RATES:	5,000	LBS/HR	120,000	LBS/DAY	21,900	TONS/YR
STACK FLO	W RATE AND VELOC	TY CALCUL	ATIONS <sup>.</sup>				
STACK DIAM			<u>1.00</u>	FT	AREA (A)=	0.79	FT^2
	PERATURE (Tf) =		84		,	0.70	
STACK FLO	WRATE =	1,200	ACFM				
STACK VELO	OCITY =	10	FT/SEC				
COMBUSTIC	ON EMISSIONS:	(PER AP-42	2 9.13.3 SNAC	K CHIP DE	EP FAT FR	YING)	
		,				,	
(LBS/TON N	UTS ROASTED)	POTENTIAL	HOURLY	POTENTIAL	DAILY	POTENTIAL	ANNUAL
	TES	(LB	S/HR)	(LBS/	DAY)	(LBS/YR)	(TPY)
	NUTS ROASTED)		2.00		48.00	17520.00	8.76
	, 						
	N NUTS ROASTED)		0.21		5.10	1861.50	0.93
	INUIS NUASIEU)		0.21		5.10	1001.00	0.93

INPUT ALCULATION				CINCIN	INATI, OH (513)					
ΝΑΤ										
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)										
FACILITY: KENLAKE FOODS DATE: July 2024										
SOURCE:		3 - Nut Roast			11225					
	CALCULA	TE "ACTUAL	" OR "POTENTIAL" EN	MISSIONS? PO	TENTIAL					
(NOTE: POTENTIAL EMIS	SSIONS CAL	CULATED AUT	OMATICALLY BY ENTERIN	G RATED BTU/HR CAPA	CITY.)					
FOR ACTUAL EN	MISSIONS, E	ENTER ACTUAL	/ ESTIMATED FUEL USAG	ES						
FUEL CONSUMPTION										
MAX RATED HEAT INF			2,700,000	BTU/HR (@ 1021	BTU/FT^3)					
NATURAL GAS CONSU			2,700,000 2,644 FT^3/HR	63,467 FT^3/DA		FT^3/YR				
NOTE: NATURAL G		MARY FUEL				,				
			_							
COMBUSTION EMISSI	ONS:		(PER AP-42 NATURA	L GAS EMISSION FA	CTORS)					
	EMISSIO		POTENTIAL HOURLY	POTENTIAL DAILY	POTENTIAL	ANNUAL				
HAPS	FACTOR									
	(LB/10^6	/	(LBS/HR)	(LBS/DAY)	(LBS/YR)	(TPY)				
2-Methylnaphthalene		2.40E-05	0.0000	0.0000	0.0006	0.00				
3-Methylchloranthrene	<	1.80E-06	0.0000	0.0000	0.0000	0.00				
7,12-Dimethylbenz	<	1.60E-05	0.0000	0.0000	0.0004	0.00 0.00				
Acenaphthene Acenaphthylene	< <	1.80E-06 1.80E-06	0.0000 0.0000	0.0000 0.0000	0.0000	0.00				
Acenaphinylene	<	2.40E-06	0.0000	0.0000	0.0000	0.00				
Benz(a)anthracene	<	1.80E-06	0.0000	0.0000	0.0001	0.00				
Benzene		2.10E-03	0.0000	0.0001	0.0486	0.00				
Benzo(a)pyrene	<	1.20E-06	0.0000	0.0000	0.0000	0.00				
Benzo(b)fluoranthene	<	1.80E-06	0.0000	0.0000	0.0000	0.00				
Benzo(g,h,i)perylene	<	1.20E-06	0.0000	0.0000	0.0000	0.00				
Benzo(k)fluoranthene	<	1.80E-06	0.0000	0.0000	0.0000	0.00				
Butane		2.10E+00	0.0056	0.1333	48.6476	0.02				
Chrysene	<	1.80E-06	0.0000	0.0000	0.0000	0.00				
Dibenzo(a,h)anthracene	<	1.20E-06	0.0000	0.0000	0.0000	0.00				
Dichlorobenzene		3.10E+00	0.0082	0.1967	71.8131	0.04				
Ethane		2.80E-06	0.0000	0.0000	0.0001	0.00				
Fluoranthene		1.80E+00	0.0048	0.1142	41.6979	0.02				
Formaldehyde		6.10E-04	0.0000	0.0000	0.0141	0.00				
Indeno(1,2,3-cd)pyrene 1.70E-05 0.0000 0.0000 0.0004 0.00										
Pentane		1.60E+00	0.0042	0.1015	37.0648	0.02				
Propane		5.00E-06	0.0000	0.0000	0.0001	0.00				
Toluene		3.40E-03	0.0000	0.0002	0.0788	0.00				
Total			0.0228	0.5462	199.3670	0.10				

INPUT CALCULATION					CINCIN	NATI, OH (513) 2	41-1230				
		NUT ROAS	TING - DEE	- P FAT FRYIN	IG						
FACILITY:		AKE FOODS		DATE:		/ 2024					
SOURCE:		Roaster #1 Air C E "ACTUAL" OR		JOB #:		25.00 ENTIAL					
		ACTUAL ON	FUILINIAL		FUI						
NUT BOAST	ING CAPACITY:										
	DASTING RATE:		5 000	LBS/HR							
NUT ROAST		5 000	LBS/HR	120,000		21 000	TONS/YR				
NUT RUAST	RATES.	5,000	LD3/NK	120,000	LD3/DAT	21,900					
STACK FLO	STACK ELOW PATE AND VELOCITY CALCULATIONS:										
STACK FLOW RATE AND VELOCITY CALCULATIONS:         STACK DIAMETER (D) =       2.5         FT       AREA (A)=         4.91       FT^2											
STACK TEMPERATURE (Tf) = <b>75</b> F											
STACK FLO	WRATE =	10,600	ACFM								
STACK VELO	<u> - YTIJC</u>	36.0	FT/SEC								
EMISSIONS	CONTROL EQUIPME	NT:									
	MBIENT AIR FILTER -				% PM 10						
PRIMARY, A	MBIENT AIR FILTER -	REMOVAL EFF	FICIENCY	85	% PM 2.5						
COMBUSTIC	ON EMISSIONS:	(PER AP-42 9. <sup>-</sup>	13.3 SNACK C	HIP DEEP FAT	FRYING)						
	UTS ROASTED)	POTENTIAL UNCONTROLLED		POTENTIAL UNCONTROLLED							
		(LBS/		(LBS/D/		(TPY)	(TPY)				
PARTICULA	· /	,, , ,, , ,, , ,, , ,, , ,, , ,, , , , , , , , , , , , , , , , , , , ,	,			· · · · · · · · · · · · · · · · · · ·					
(0.26 LB/TON	NUTS ROASTED)	0.33	0.0003	7.8	0.01	1.42	0.001				
PARTICULA	TES (PM 2 5)										
	NUTS ROASTED)	0.33	0.05	7.8	1.17	1.42	0.21				
	ED CALCULATIONS:										
Hourly (lbs/hr) = Max Nut Roasting Rate (lbs/hr) X Emission Factor (lbs/ton) X (1 - Removal Efficency)											
Daily (lbs/br)	2000 lbs/ton Daily (lbs/hr) = Hourly (lbs/hr) X 24 hrs/day										
	') = Daily (lbs/hr) X 365	•	0 lbs/ton								
	-42 PM10 uncontrollec			roasted.							

AP-42 Emmision Factor based on combined exhaust flow stream. Therefore assumed 50 % of particulates

emitted from roaster and 50 % from the cooler.

Assume PM10=PM2.5

INPUT CALCULATION			CINCIN	NATI, OH (513) 2	41-1230						
<u> </u>	DRY PACK CENTRAL VA	CUUM SYST	EM								
	AKE FOODS	DATE:	July	y 2024							
	ack Central Vacuum	JOB #:		1225							
DUST COLLECTOR HANDLING CAP MAX DUST COLLECTION RATE: DUST COLLECTION RATES:		LBS/HR 3,960	LBS/DAY	723	]TONS/YR						
STACK FLOW RATE AND VELOCITY STACK DIAMETER (D) = STACK TEMPERATURE (Tf) = STACK FLOW RATE =	<u>CALCULATIONS:</u> 0.330 75 600 ACFM		AREA (A)=	0.09	FT^2						
STACK VELOCITY =	FT/SEC										
EMISSIONS CONTROL EQUIPMENT PRIMARY, CYCLONE - REMOVAL EI SECONDARY, FILTER - REMOVAL E	FFICIENCY 75										
COMBUSTION EMISSIONS:	(PER KDAQ 1993 EMISSION	INVENTORY R	EPORT)								
(HOURS OF OPERATION)	POTENTIAL HOURLY UNCONTROLLED (LBS/HR)	POTENTIAL UNCONTROLLED (LBS/DA		POTENTIAL UNCONTROLLED (TPY)	ANNUAL CONTROLLED (TPY)						
PARTICULATES, TOTAL & PM10	165 <b>0.04</b>	3960	0.99	722.70	0.18						
CALCULATIONS: Hourly (lbs/hr) = <u>Max Nut Roasting Ra</u> Daily (lbs/hr) = Hourly (lbs/hr) X 24 hr Annual (lbs/yr) = Daily (lbs/day) X 365 Annual (TBX) = Annual (lbs/day) X 365	2000 s/day 5 days/year	( <u>lbs/ton) X (1 - R</u> 0 lbs/ton	emoval Effic	iency)							

Annual (TPY) = Annual (lbs/yr) / 2000 lbs/ton

INPUT			XSC	DN									
CALCULATION		CINCIN	NATI, OH (513) 2	241-1230									
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)													
FACILITY: KENLA	KE FOODS	DATE: Ju	y 2024										
SOURCE: EU 06 - HEA	T EXCHANGER		225.00										
CALCULATE "AC	TUAL" OR "POTENTIAL" E	MISSIONS? POT	ENTIAL										
(NOTE: POTENTIAL EMISSIONS CALCULAT			ITY.)										
FOR ACTUAL EMISSIONS, ENTER	ACTUAL / ESTIMATED FUEL USA	GES											
FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS):													
NATURAL GAS HEAT CONTENT VALUE 1,020 BTU/FT^3													
MAX RATED HEAT INPUT CAPACITY 2,800,000 BTU/HR (@ 1021 BTU/FT^3)													
NATURAL GAS CONSUMPTION <b>2,745</b> FT^3/HR <b>65,882</b> FT^3/DAY <b>24,047,059</b> FT^3/YR													
NOTE: NATURAL GAS IS PRIMAR													
COMBUSTION DATA (FOR STACK FL	OW RATE AND VELOCITY	CALCULATIONS):											
COMBUSTION RATIO (CR) =		3 FT^3/FT^3											
COMBUSTION PRODUCTS (PC) =	11.73	B FT^3/FT^3											
EXCESS AIR (EA) =	0.25	5 (OR 25%)											
STACK DIAMETER (D) =		FT AREA (A)=	2 19	FT^2									
STACK TEMPERATURE (Tf) =	950												
		<b>'</b> ''											
STACK FLOW RATE =	1,750 ACFM												
STACK FLOW RATE (ACFM) = ((GC (	GAL/HR) / 60) * (PC + (CR	* EA))) * ((460 + Tf) / 53	0)										
<u>STACK VELOCITY =</u> STACK VELOCITY (FT/SEC) = ((STAC		(A (FT^2))) / (60 SEC/M											
COMBUSTION EMISSIONS:	(PER AP-42 NATURAL GA	S EMISSION FACTOR	S)										
(LBS/10^6 FT^3 GAS USED)	POTENTIAL HOURLY	POTENTIAL DAILY	POTENTIAL	ANNUAL									
	(LBS/HR)	(LBS/DAY)	(LBS/YR)										
PARTICULATES													
	0.02	0.50	182 76	(TPY)									
( 7.6 lbs / 10^6 FT^3)	0.02	0.50	182.76	(TPY) 0.09									
	0.02	0.50	182.76										
( 7.6 lbs / 10^6 FT^3)	0.02	0.50	182.76 14.43										
( 7.6 lbs / 10^6 FT^3) SULFUR DIOXIDE ( 0.60 lbs / 10^6 FT^3)				0.09									
( 7.6 lbs / 10^6 FT^3) SULFUR DIOXIDE ( 0.60 lbs / 10^6 FT^3) NITROGEN OXIDES	0.00	0.04	14.43	0.09									
( 7.6 lbs / 10^6 FT^3) SULFUR DIOXIDE ( 0.60 lbs / 10^6 FT^3)				0.09									
<ul> <li>( 7.6 lbs / 10^6 FT^3)</li> <li>SULFUR DIOXIDE</li> <li>( 0.60 lbs / 10^6 FT^3)</li> <li>NITROGEN OXIDES</li> <li>( 100.0 lbs / 10^6 FT^3)</li> </ul>	0.00	0.04	14.43	0.09									
( 7.6 lbs / 10^6 FT^3) SULFUR DIOXIDE ( 0.60 lbs / 10^6 FT^3) NITROGEN OXIDES	0.00	0.04	14.43	0.09									
<ul> <li>( 7.6 lbs / 10^6 FT^3)</li> <li>SULFUR DIOXIDE         <ul> <li>( 0.60 lbs / 10^6 FT^3)</li> </ul> </li> <li>NITROGEN OXIDES         <ul> <li>( 100.0 lbs / 10^6 FT^3)</li> </ul> </li> <li>CARBON MONOXIDE         <ul> <li>( 84.0 lbs / 10^6 FT^3)</li> </ul> </li> </ul>	0.00	0.04	14.43 2404.71	0.09 0.01 1.20									
<ul> <li>( 7.6 lbs / 10^6 FT^3)</li> <li>SULFUR DIOXIDE         <ul> <li>( 0.60 lbs / 10^6 FT^3)</li> </ul> </li> <li>NITROGEN OXIDES         <ul> <li>( 100.0 lbs / 10^6 FT^3)</li> </ul> </li> <li>CARBON MONOXIDE         <ul> <li>( 84.0 lbs / 10^6 FT^3)</li> </ul> </li> <li>VOLATILE ORGANIC COMPS</li> </ul>	0.00 0.27 0.23	0.04 6.59 5.53	14.43 2404.71 2019.95	0.09 0.01 1.20 1.01									
<ul> <li>( 7.6 lbs / 10^6 FT^3)</li> <li>SULFUR DIOXIDE         <ul> <li>( 0.60 lbs / 10^6 FT^3)</li> </ul> </li> <li>NITROGEN OXIDES         <ul> <li>( 100.0 lbs / 10^6 FT^3)</li> </ul> </li> <li>CARBON MONOXIDE         <ul> <li>( 84.0 lbs / 10^6 FT^3)</li> </ul> </li> </ul>	0.00	0.04	14.43 2404.71	0.09 0.01 1.20									

Note: Emission Factor = <u>AP 42 Emission Factor x Actual Heat Content Value</u> EPA Heat Content Value (1020 BTU/FT<sup>3</sup>)

INPUT	-										
CALCULATION	_				CINCIN	NATI, OH (513)	241-1230				
<u>N</u> A	TURAL GAS	COMBUST	ION EMISSIO	<u> DNS (&lt; 100</u>	MMBTU/	<u>HR)</u>					
FACILITY:	KENLAK			DATE:	lul.	y 2024					
SOURCE:	EU 06 - HEAT		3	JOB #:		225.00					
	CALCULATE "/					ENTIAL					
(NOTE: POTENTIAL EMIS	SIONS CALCULATE	D AUTOMATICA	LLY BY ENTERING	G RATED BTU/H	R CAPACITY.	)					
FOR ACTUAL EM	FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES										
FUEL CONSUMPTION I											
NATURAL GAS HEAT C			<u>1,020</u>	BTU/FT^3							
MAX RATED HEAT INP			2,800,000		(@ 1021 B	TU/FT^3)					
NATURAL GAS CONSU	MPTION	<b>2,745</b> F	T^3/HR			24,047,059	FT^3/YR				
NOTE: NATURAL G	AS IS PRIMARY	FUEL.									
COMBUSTION EMISSIC	DNS:	(PER AP-42 I	NATURAL GAS	EMISSION F	ACTORS)						
		-	-								
PARAMETERS HAPS	EMISSION FACTOR	POTENTIAL	HOURLY	POTENTIAL	DAILY	POTENTIAL	ANNUAL				
	(LB/10^6 FT^3)	(1.8)	S/HR)	(LBS/D		(LBS/YR)	(TPY)				
2-Methylnaphthalene	2.40E-05	0.0000	5/m ()	0.0000	,,,,,	0.0006	0.00				
3-Methylchloranthrene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
(a)anthracene	< 1.60E-05	0.0000		0.0000		0.0004	0.00				
Acenaphthene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Acenaphthylene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Anthracene	< 2.40E-06	0.0000		0.0000		0.0001	0.00				
Benz(a)anthracene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Benzene	2.10E-03	0.0000		0.0001		0.0505	0.00				
Benzo(a)pyrene	< 1.20E-06	0.0000		0.0000		0.0000	0.00				
Benzo(b)fluoranthene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Benzo(g,h,i)perylene	< 1.20E-06	0.0000		0.0000		0.0000	0.00				
Benzo(k)fluoranthene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Butane	2.10E+00	0.0058		0.1384		50.4988	0.03				
Chrysene	< 1.80E-06	0.0000		0.0000		0.0000	0.00				
Dibenzo(a,h)anthracene		0.0000		0.0000		0.0000	0.00				
Dichlorobenzene	3.10E+00	0.0085		0.2042		74.5459	0.04				
Ethane	2.80E-06	0.0000		0.0000		0.0001	0.00				
Fluoranthene	1.80E+00	0.0049		0.1186		43.2847	0.02				
Formaldehyde	6.10E-04	0.0000		0.0000		0.0147	0.00				
Indeno(1,2,3-cd)pyrene	1.70E-05	0.0000		0.0000		0.0004	0.00				
Pentane	1.60E+00	0.0044		0.1054		38.4753	0.02				
Propane	5.00E-06	0.0000		0.0000		0.0001	0.00				
Toluene	3.40E-03	0.0000		0.0002		0.0818	0.00				
Total		0.0236		0.5670		206.9536	0.10				

Note: Emission Factor = <u>AP 42 Emission Factor x Actual Heat Content Value</u> EPA Heat Content Value (1020 BTU/FT^3)

INPUT CALCULATION					CINNATI, OH (51	3) 241-1230
	NUT RO	ASTING - I	DEEP FAT F	RYING		
SOURCE: EU 07		POTENTIAL <sup>®</sup> MATICALLY BY	ENTERING RATE	112 POTI	7 2024 25.00 ENTIAL ACITY.)	
NUT ROASTING CAPACITY: MAX NUT ROASTING RATE: NUT ROAST RATES:	7,500	<mark>7,500</mark> LBS/HR	LBS/HR 180,000	LBS/DAY	32,850	TONS/YR
<u>STACK FLOW RATE AND VEL(</u> STACK DIAMETER (D) = STACK TEMPERATURE (Tf) = <u>STACK FLOW RATE =</u>	DCITY CALCULA	1.33 260	FT F	AREA (A)=	1.39	FT^2
<u>STACK VELOCITY</u> = <u>EMISSIONS CONTROL EQUIP</u> PRIMARY, DE-MISTER - REMC PRIMARY, DE-MISTER - REMC	MENT: DVAL EFFICIENC DVAL EFFICIENC	CY	85	% PM 10 % PM 2.5		
COMBUSTION EMISSIONS:	(PER AP-42 9.1		CHIP DEEP FA	T FRYING)		
(LBS/TON NUTS ROASTED)	POTENTIAL UNCONTROLLED (LBS/H		POTENTIAL UNCONTROLLED (LBS/D		POTENTIAL UNCONTROLLED (TPY)	ANNUAL CONTROLLED (TPY)
PARTICULATES (PM 10) (0.26 LB/TON NUTS ROASTED)	0.49	0.0005	11.70	0.01	2.14	0.002
PARTICULATES (PM 2.5) (0.26 LB/TON NUTS ROASTED)	0.49	0.07	11.70	1.76	2.14	0.32
VOC (0.085 LB/TON NUTS ROASTED)	0.32	0.32	7.65	7.65	1.40	1.40
CONTROLLED CALCULATION Hourly (lbs/hr) = <u>Max Nut Roast</u> Daily (lbs/hr) = Hourly (lbs/hr) X Annual (TPY) = Daily (lbs/hr) X	ing Rate (lbs/hr) 24 hrs/day 365 days/year / 2	2000 lbs/ 2000 lbs/ton	ton	X (1 - Remov	al Efficency)	

Note: Per AP-42 PM10 uncontrolled emission factor is 0 lb/ton nut roasted.

AP-42 Emmision Factor based on combined exhaust flow stream. Therefore assumed 50 % of particulates emitted from roaster and 50 % from the cooler.

Assume PM10=PM2.5

INPUT CALCULATION				CINCIN	NATI, OH (513) 2	41-1230					
	NUT ROAST	ING - DEE	P FAT FRYIN	IG							
			_								
	KE FOODS	alar	DATE:		2024						
	Daster #2 Air Co "ACTUAL" OR "		JOB #: FMISSIONS?		25.00 ENTIAL						
NUT ROASTING CAPACITY:											
MAX NUT ROASTING RATE:		7 500	LBS/HR								
NUT ROAST RATES:	7,500 ∟			LBS/DAY	32 850	TONS/YR					
	7,500		180,000		52,850						
STACK FLOW RATE AND VELOCIT		DNS:									
STACK DIAMETER (D) =		2.500	FT .	AREA (A)=	4.91	FT^2					
STACK TEMPERATURE (Tf) =		120	F								
STACK TEMPERATURE (II) = 120 F											
STACK FLOW RATE =	<b>21,568</b> A	ACFM									
STACK VELOCITY =	<b>73.3</b> F	T/SEC									
EMISSIONS CONTROL EQUIPMEN			00.0]	% PM 10							
PRIMARY, AMBIENT AIR FILTER - F PRIMARY, AMBIENT AIR FILTER - F				% PM 10 % PM 2.5							
· · · · · · · · · · · · · · · · · · ·											
COMBUSTION EMISSIONS: (	PER AP-42 9.13	3.3 SNACK C	HIP DEEP FAT	FRYING)							
(LBS/TON NUTS ROASTED)	DOTENTIAL		DOTENTIAL	DAILV	POTENTIAL						
	POTENTIAL JNCONTROLLED C		POTENTIAL UNCONTROLLED	DAILY CONTROLLED	-	ANNUAL CONTROLLED					
	(LBS/H		(LBS/D		(TPY)	(TPY)					
PARTICULATES (PM 10)											
(0.26 LB/TON NUTS ROASTED)	0.49	0.0005	11.7	0.01	2.14	0.002					
PARTICULATES (PM 2.5)											
(0.26 LB/TON NUTS ROASTED)	0.49	0.07	11.7	1.76	2.14	0.32					
CONTROLLED CALCULATIONS: Hourly (lbs/hr) = Max Nut Roasting F	Data (lba/br) V E	mission East	vr (lba/tap) V (1	Bomoval E	fficency						
i viax nut Roasting P	$(IDS/III) \land EI$	2000 lbs/to									
Daily (lbs/hr) = Hourly (lbs/hr) X 24 h	irs/day										
Annual (TPY) = Daily (lbs/hr) X 365 of Note: Per AP-42 PM10 uncontrolled et al.											

AP-42 Emmision Factor based on combined exhaust flow stream. Therefore assumed 50 % of particulates emitted from roaster and 50 % from the cooler.

Assume PM10=PM2.5

INPUT CALCULATION			NATI, OH (513) 2	41-1230						
NATURAL GAS	COMBUSTION EMISS	SIONS (< 100 MME	TU/HR)							
SOURCE: MECHANICAL R CALCULATE "ACTU (NOTE: POTENTIAL EMISSIONS CALC		JOB #: 1 MISSIONS? POT ENTERING RATED BTU/HR	y 2024 1225 ENTIAL CAPACITY.)							
FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES										
FUEL CONSUMPTION DATA (FOR EMISSIONS CALCULATIONS):         MAX RATED HEAT INPUT CAPACITY       1,720,600       BTU/HR       (@ 1021 BTU/FT^3)         NATURAL GAS CONSUMPTION       1,685       FT^3/HR       40,445       FT^3/DAY       14,762,445       FT^3/YR         NOTE:       NATURAL GAS IS PRIMARY FUEL.										
COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS):COMBUSTION RATIO (CR) =10.58 FT^3/FT^3COMBUSTION PRODUCTS (PC) =11.73 FT^3/FT^3EXCESS AIR (EA) =0.25 (OR 25%)STACK DIAMETER (D) =3.30 FT AREA (A)=STACK TEMPERATURE (Tf) =94 F										
<u>STACK FLOW RATE =</u> STACK FLOW RATE (ACFM) = ((0	<b>422</b> ACFM GC (GAL/HR) / 60) * (PC +	(CR * EA))) * ((460 + T	f) / 530)							
STACK VELOCITY = STACK VELOCITY (FT/SEC) = ((S	1 FT/SEC TACK FLOWRATE (ACFN	/I)) / (A (FT^2)))/(60 \$	SEC/MIN)							
COMBUSTION EMISSIONS:	(PER AP-42 NATURAL G	AS EMISSION FACTO	RS)							
(LBS/10^6 FT^3 GAS USED)	POTENTIAL HOURLY (LBS/HR)	POTENTIAL DAILY (LBS/DAY)	POTENTIAL (LBS/YR)	ANNUAL (TPY)						
PARTICULATES (7.6 LBS/10^6 FT^3 GAS)	0.01	0.31	112.19	0.06						
SULFUR DIOXIDE (0.6 LBS/10^6 FT^3 GAS)	0.00	0.02	8.86	0.00						
NITROGEN OXIDES (100 LBS/10^6 FT^3 GAS)	0.17	4.04	1476.24	0.74						
CARBON MONOXIDE (84 LBS/10^6 FT^3 GAS)	0.14	3.40	1240.05	0.62						
VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS)	0.01	0.22	81.19	0.04						

INPUT							
CALCULATION		CINCIN	NATI, OH (513) 2	41-1230			
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)							
	KE FOODS INE MAKE-UP AIR		y 2024 1225				
	IAL" OR "POTENTIAL" EN		ENTIAL				
(NOTE: POTENTIAL EMISSIONS CALC							
FOR ACTUAL EMISSIONS, EN	TER ACTUAL / ESTIMATED FUI	EL USAGES					
FUEL CONSUMPTION DATA (FOR	EMISSIONS CALCULATI	ONS):					
MAX RATED HEAT INPUT CAPAC	TY <b>1,103,000</b>	BTU/HR (@ 1021 B	TU/FT^3)				
PACKAGING ROOM RTU (Max Inp	out) 810,000	BTU/HR (@ 1021 B	TU/FT^3)				
FILLING ROOM RTU (Max Input)	293,000	BTU/HR (@ 1021 B	TU/FT^3)				
NATURAL GAS CONSUMPTION	1,080 FT^3/HR	25,928 FT^3/DAY	9,463,546	FT^3/YR			
NOTE: NATURAL GAS IS PRIM	ARY FUEL.						
COMBUSTION DATA (FOR STACK	FLOW RATE AND VELO	CITY CALCULATIONS	<u>;):</u>				
COMBUSTION RATIO (CR) =	10.58	FT^3/FT^3					
COMBUSTION PRODUCTS (PC) =	· 11.73	FT^3/FT^3					
EXCESS AIR (EA) =	0.25	(OR 25%)					
STACK DIAMETER (D) =	1.13	FT AREA (A)=	1.00	FT^2			
STACK TEMPERATURE (Tf) =	128	F					
<u>STACK FLOW RATE =</u> STACK FLOW RATE (ACFM) = ((0	287 ACFM	(CR * FA))) * ((460 + 1	f) / 530)				
			1) / 000)				
STACK VELOCITY =	5 FT/SEC						
STACK VELOCITY (FT/SEC) = ((S	TACK FLOWRATE (ACFN	/I)) / (A (FT^2))) / (60	SEC/MIN)				
COMBUSTION EMISSIONS:	(PER AP-42 NATURAL G	AS EMISSION FACTO	(RS)				
	(						
(LBS/10^6 FT^3 GAS USED)	POTENTIAL HOURLY	POTENTIAL DAILY	POTENTIAL	ANNUAL			
PARTICULATES	(LBS/HR)	(LBS/DAY)	(LBS/YR)	(TPY)			
(7.6 LBS/10^6 FT^3 GAS)	0.01	0.20	71.92	0.04			
``````````````````````````````````````							
	0.00		5.00	0.00			
(0.6 LBS/10^6 FT^3 GAS)	0.00	0.02	5.68	0.00			
NITROGEN OXIDES							
(100 LBS/10^6 FT^3 GAS)	0.11	2.59	946.35	0.47			
CARBON MONOXIDE (84 LBS/10^6 FT^3 GAS)	0.09	2.18	794.94	0.40			
	0.09	2.10	/ 34.34	0.40			
VOLATILE ORGANIC COMPS							
(5.5 LBS/10^6 FT^3 GAS)	0.01	0.14	52.05	0.03			

14 - 11225\_PTE (with Multiple EU Tabs)\_2024\_0715.xlsx

INPUT CALCULATION			NATI, OH (513) 2	41-1230		
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)						
FACILITY:       KENLAKE FOODS       DATE:       July 2024         SOURCE:       WATER HEATERS 1 & 2       JOB #:       11225        CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS?       POTENTIAL         (NOTE: POTENTIAL EMISSIONS CALCULATED AUTOMATICALLY BY ENTERING RATED BTU/HR CAPACITY.)         FOR ACTUAL EMISSIONS, ENTER ACTUAL / ESTIMATED FUEL USAGES						
FUEL CONSUMPTION DATA (FOR	EMISSIONS CALCULATI	ONS):				
MAX RATED HEAT INPUT CAPAC NATURAL GAS CONSUMPTION <i>NOTE: NATURAL GAS IS PRIN</i>	ITY <b>1,200,000</b> <b>1,175</b> FT^3/HR			FT^3/YR		
COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS):COMBUSTION RATIO (CR) =10.58 FT^3/FT^3COMBUSTION PRODUCTS (PC) =11.73 FT^3/FT^3EXCESS AIR (EA) =0.25 (OR 25%)STACK DIAMETER (D) =1.33 FTAREA (A)=1.39 FT^2						
STACK TEMPERATURE (Tf) =       93       F         STACK FLOW RATE =       294       ACFM         STACK FLOW RATE (ACFM) = ((GC (GAL/HR) / 60) * (PC + (CR * EA))) * ((460 + Tf) / 530)       STACK VELOCITY =         4       FT/SEC						
STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN) <u>COMBUSTION EMISSIONS:</u> (PER AP-42 NATURAL GAS EMISSION FACTORS) (Low Nox)						
(LBS/10^6 FT^3 GAS USED)	POTENTIAL HOURLY	POTENTIAL DAILY	POTENTIAL	ANNUAL		
PARTICULATES	(LBS/HR)	(LBS/DAY)	(LBS/YR)	(TPY)		
(7.6 LBS/10^6 FT^3 GAS)	0.01	0.21	78.25	0.04		
SULFUR DIOXIDE (0.6 LBS/10^6 FT^3 GAS)	0.00	0.02	6.18	0.00		
NITROGEN OXIDES (50 LBS/10^6 FT^3 GAS)	0.06	1.41	514.79	0.26		
CARBON MONOXIDE (84 LBS/10^6 FT^3 GAS)	0.10	2.37	864.85	0.43		
VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS)	0.01	0.16	56.63	0.03		

INPUT CALCULATION				NATI, OH (513) 2	41-1230	
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)						
SOURCE: WATER	KE FOODS HEATER #3	DATE: JOB #:	1	y 2024 1225		
(NOTE: POTENTIAL EMISSIONS CALC	UAL " OR "POTENTIAL " EN ULATED AUTOMATICALLY BY I ITER ACTUAL / ESTIMATED FUI	ENTERING RA		ENTIAL CAPACITY.)		
FUEL CONSUMPTION DATA (FOR MAX RATED HEAT INPUT CAPAC NATURAL GAS CONSUMPTION		BTU/HR	(@ 1021 B FT^3/DAY		FT^3/YB	
NOTE: NATURAL GAS IS PRIM		0,101		2,000,102		
COMBUSTION DATA (FOR STACK FLOW RATE AND VELOCITY CALCULATIONS):COMBUSTION RATIO (CR) = $10.58 \text{ FT}^3/\text{FT}^3$ COMBUSTION PRODUCTS (PC) = $11.73 \text{ FT}^3/\text{FT}^3$ EXCESS AIR (EA) = $0.25 \text{ (OR } 25\%)$ STACK DIAMETER (D) = $0.83 \text{ FT}$ AREA (A)=STACK TEMPERATURE (Tf) = $93 \text{ F}$						
STACK FLOW RATE =	<b>67</b> ]ACFM GC (GAL/HR) / 60) * (PC +	(CR * EA)))	* ((460 + T	f) / 530)		
STACK VELOCITY =       2       FT/SEC         STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN)         COMBUSTION EMISSIONS:       (PER AP-42 NATURAL GAS EMISSION FACTORS)						
(LBS/10^6 FT^3 GAS USED)		POTENTIAL	DAILY			
``````````````````````````````````````	POTENTIAL HOURLY (LBS/HR)	LBS/		POTENTIAL (LBS/YR)	ANNUAL (TPY)	
PARTICULATES (7.6 LBS/10^6 FT^3 GAS)	0.00		0.05	17.93	0.01	
SULFUR DIOXIDE (0.6 LBS/10^6 FT^3 GAS)	0.00		0.00	1.42	0.00	
NITROGEN OXIDES (100 LBS/10^6 FT^3 GAS)	0.03		0.65	235.95	0.12	
	0.03		0.05	200.90	0.12	
(84 LBS/10 <sup>6</sup> FT <sup>3</sup> GAS)	0.02		0.54	198.19	0.10	
VOLATILE ORGANIC COMPS (5.5 LBS/10^6 FT^3 GAS)	0.00		0.04	12.98	0.01	

INPUT CALCULATION							ATI, OH (513)	
ΝΔ			BUSTION E	MISSION	 S (< 100 M			
					_			
FACILITY:		NLAKE FOO			DATE:		2024	
SOURCE:		gnificant Act			JOB #:		225	
			AL" OR "POT					
(NOTE: POTENTIAL EMIS						R CAPACITY.	.)	
FOR ACTUAL EN	AISSIONS, EI	NIER ACTUAL	/ESTIMATED F	UEL USAGES				
FUEL CONSUMPTION I	DATA (FOI	R EMISSION	IS CALCULA	TIONS):				
MAX RATED HEAT INP			<u> </u>	4,298,600	BTU/HR	(@ 1021 B	STU/FT^3)	
NATURAL GAS CONSU			<b>4,210</b> F	T^3/HR			36,881,230	FT^3/YR
NOTE: NATURAL G		MARY FUEL						
COMBUSTION EMISSIC	ONS:		(PER AP-42	NATURAL	GAS EMISSI	ON FACT	ORS)	
					-		·	
PARAMETERS	EMISSIO	N	POTENTIAL	HOURLY	POTENTIAL	DAILY	POTENTIAL	ANNUAL
HAPS	FACTOR							
O Mathula an bib a law a	(LB/10^6	/	(LBS) 0.0000	/HR)	(LBS/I	DAY)	(LBS/YR)	(TPY)
2-Methylnaphthalene 3-Methylchloranthrene	<	2.40E-05 1.80E-06	0.0000		0.0000		0.0009	0.00
7,12-Dimethylbenz	<	1.60E-06	0.0000		0.0000		0.0001	0.00
Acenaphthene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Acenaphthylene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Anthracene	<	2.40E-06	0.0000		0.0000		0.0001	0.00
Benz(a)anthracene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Benzene		2.10E-03	0.0000		0.0002		0.0775	0.00
Benzo(a)pyrene	<	1.20E-06	0.0000		0.0000		0.0000	0.00
Benzo(b)fluoranthene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Benzo(g,h,i)perylene	<	1.20E-06	0.0000		0.0000		0.0000	0.00
Benzo(k)fluoranthene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Butane		2.10E+00	0.0088		0.2122		77.4506	0.04
Chrysene	<	1.80E-06	0.0000		0.0000		0.0001	0.00
Dibenzo(a,h)anthracene	<	1.20E-06	0.0000		0.0000		0.0000	0.00
Dichlorobenzene		3.10E+00	0.0131		0.3132		114.3318	0.06
Ethane		2.80E-06	0.0000		0.0000		0.0001	
Fluoranthene Formaldehyde		1.80E+00 6.10E-04	0.0076		0.1819		66.3862 0.0225	0.03
Indeno(1,2,3-cd)pyrene		1.70E-04	0.0000		0.0001		0.0225	0.00
Pentane		1.60E+00	0.0000		0.1617		59.0100	0.00
Propane		5.00E-06	0.0007		0.0000		0.0002	0.00
Toluene		3.40E-03	0.0000		0.0003		0.1254	0.00
Total		0	0.0362		0.8696		317.4070	0.16

			<b>50N</b>				
CALCULATION CINCINNATI, OH (513) 241-1230							
BULK SUGAR RECEIVING SYSTEM							
FACILITY:	KENLAKE FOODS	DATE:	July 2024				
SOURCE:	BULK SUGAR RECEIVING CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS	JOB #:	11225.00 POTENTIAL				
	CALCULATE ACTUAL OR POTENTIAL EMISSIONS	<u>/</u> [	PUTEINTIAL				
MATERIAL	AND SYSTEM DATA						
MATERIAL:	BULK SUGAR RECEIVING PARTICLE SIZE:	200 MICRO	DNS AVERAGE				
MAXIMUM REC	EIVING CAPACITY: <b>30,000</b> LBS/HR UNLOADING E	ENCLOSED?	YES				
TOTAL SUGAF	RECEIVING PER YEAR (POTENTIAL): 262,800,00	0 LBS/YR					
OPERATING E	FFICIENCY OF "IN PROCESS" FILTERS: 99	<b>.9</b> %					
	TOR (% OF HANDLING CAPACITY): 3.5 FLOUR MILLING EMISSION FACTOR = 3.5% (40 MICRON PARTICLES AVERAGE)	i <b>0</b> %					
EMISSION	CALCULATIONS (MAXIMUM)						
<u>RECEIVING S</u>	EYSTEM ANNUAL: 262,800,000 LBS/YR X 3.50 % X 0.1	% =	9,198 LBS/YR PM MAX 4.60 TPY PM MAX				
SOURCE TO							
	HOURLY: 1.05 LBS/HR PM MAX						
	DAILY: 25.20 LBS/DAY PM MAX						
	ANNUAL: 4.60 TPY PM MAX						
	ALL EMISSIONS FROM UNLOADING ARE VENTED INSIDE THE FACILITY. TRUCKS UNLOADING CONNECTION IS OUTSIDE, BUT ALL RECEIVING EQUIPMENT IS INSIDE AND VENTED INSIDE THE FACILITY.						
[	NOTE: RAIL CAR UNLOADING NO LONGER CONDUCTED AND ALL ASSOCIATED EQUIPMENT REMOVED.						

CALCULATION     CINCINNATI, OH     (513) 241-1230       SUGAR TRANSFER SYSTEM						
FACILITY: KENLAKE FOODS DATE:	<b>July 2024</b>					
SOURCE: SUGAR TRANSFER SYSTEM JOB #:	11225.00					
CALCULATE "ACTUAL" OR "POTENTIAL" EMISSIONS?	POTENTIAL					
MATERIAL AND SYSTEM DATA						
MATERIAL: SUGAR TRANSFER PARTICLE SIZE: 200 MICRON	IS AVERAGE					
MAXIMUM RECEIVING CAPACITY: <b>12,000</b> LBS/HR UNLOADING ENCLOSED?	YES					
TOTAL SUGAR RECEIVING PER YEAR (POTENTIAL): 105,120,000 LBS/YR						
OPERATING EFFICIENCY OF "IN PROCESS" FILTERS: 99.9%						
EMISSION FACTOR (% OF HANDLING CAPACITY): 3.50 % NOTE: AP-42 FLOUR MILLING EMISSION FACTOR = 3.5% (40 MICRON PARTICLES AVERAGE)						
EMISSION CALCULATIONS (MAXIMUM)						
RECEIVING SYSTEM ANNUAL: 105,120,000 LBS/YR X 3.50 % X 0.1 % =	3,679 LBS/YR PM MAX 1.84 TPY PM MAX					
SOURCE TOTALS HOURLY: 0.42 LBS/HR PM MAX						
DAILY: 10.08 LBS/DAY PM MAX						
ANNUAL: 1.84 TPY PM MAX						

INPUT CALCULATION			NATI, OH (513) 2	41-1230			
NATURAL GAS COMBUSTION EMISSIONS (< 100 MMBTU/HR)							
FACILITY: Kenlak	e Foods	DATE: Jul	y 2024				
	Natural Gas)		225.00				
	JAL" OR "POTENTIAL" EN		ENTIAL				
(NOTE: POTENTIAL EMISSIONS CALCULAT FOR ACTUAL EMISSIONS, ENTER A			ACITY.)				
FUEL CONSUMPTION DATA (FOR EM	ISSIONS CALCULATION	S):					
NATURAL GAS HEAT CONTENT VALU	JE <u>1020</u>	BTU/FT^3					
MAX RATED HEAT INPUT CAPACITY	<b>195,840</b>	BTU/HR					
NATURAL GAS CONSUMPTION	192 FT^3/HR	2,880 FT^3/DAY	2,880	FT^3/YR			
NOTE: NATURAL GAS IS PRIMAR	Y FUEL.	15 hours per day	15 hours per y	ear			
COMBUSTION DATA (FOR STACK FL							
COMBUSTION RATIO (CR) =		FT^3/FT^3					
COMBUSTION PRODUCTS (PC) =	11.73	FT^3/FT^3					
EXCESS AIR (EA) =	0.25	(OR 25%)					
STACK DIAMETER (D) =	0.25	FT AREA (A)=	0.05	FT^2			
STACK TEMPERATURE (Tf) =	<mark>356</mark>	F					
STACK FLOW RATE =       71         STACK FLOW RATE (ACFM) = ((GC (GAL/HR) / 60) * (PC + (CR * EA))) * ((460 + Tf) / 530)         STACK VELOCITY =       24.06         STACK VELOCITY (FT/SEC) = ((STACK FLOWRATE (ACFM)) / (A (FT^2))) / (60 SEC/MIN)							
COMBUSTION EMISSIONS: (PER AP-42 NATURAL GAS EMISSION FACTORS-Table 3.2-2) (4 STROKE LEAN BURN)							
(LBS/10^6 FT^3 GAS USED)	POTENTIAL HOURLY	POTENTIAL DAILY	POTENTIAL	ANNUAL			
	(LBS/HR)	(LBS/DAY)	(LBS/YR)	(TPY)			
PARTICULATES ( 10.19 lbs / 10^6 FT^3)	0.00	0.03	0.03	0.000			
, , , , , , , , , , , , , , , , , , ,							
SULFUR DIOXIDE ( 0.60 lbs / 10^6 FT^3)	0.00	0.00	0.00	0.000			
, , , , , , , , , , , , , , , , , , ,	0.00	0.00	0.00	0.000			
				0.000			
( 4161.60 lbs / 10^6 FT^3)	0.80	11.99	11.99	0.006			
CARBON MONOXIDE							
( 568.1 lbs / 10^6 FT^3)	0.11	1.64	1.64	0.001			
VOLATILE ORGANIC COMPS							
( 120.4 lbs / 10^6 FT^3)	0.02	0.35	0.35	0.000			

Note: Emission Factor = <u>AP 42 Emission Factor x Actual Heat Content Value</u>