

ADEQ

ARKANSAS
Department of Environmental Quality

December 13, 2013

Ed Perry
President
Custom Blenders Arkansas, LLC
14000 Dineen Drive
Little Rock, AR 72206-5818

RE: Application for Registration
AFIN: 60-00744 Registration No.: 1326-A-REG315

Dear Mr. Perry:

The Department has reviewed your facility's application for registration for the facility located at 14000 Dineen Drive, North Little Rock in Pulaski County, Arkansas.

The Department has determined that the information certified in the application fulfills the required criteria for registration as specified in Arkansas Air Pollution Control Code (Regulation 18), Section 18.315 and other applicable regulations. Your registration number has been assigned as 1326-A-REG315.

This registration is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your registration request received on November 12, 2013. Custom Blenders Arkansas, LLC is required to update this registration should the facility operations or emissions change so that the current registration no longer reflects actual operations.

Please maintain a copy of this letter and the application at the facility.

Sincerely,



Thomas Rheaume
Permit Branch Manager, Air Division

c: Compliance Monitoring



November 7, 2013

Ms. Paula Parker
Arkansas Department of Environmental Quality
Attn: Air Division
5301 Northshore Drive
North Little rock, Arkansas

RE: Air Permit Application Addendum
Custom Blenders Arkansas, LLC
1400 Dineen Drive
Little Rock, AR 72206-5818

Ms. Parker:

Terra Consulting, LLC is submitting the enclosed addendum to the Air Permit Application previously submitted on behalf of Custom Blenders Arkansas, LLC. The application and calculations have been revised to reflect Custom Blenders' equipment decision at the facility and their request to be reviewed for an air quality Registration. The following items have been enclosed:

Registration portion of the ADEQ Air Division Air Permit Application
Revised calculations

If you have any questions concerning the application or require additional information please contact me at (770) 573-3055 or jacki@terraconsultingllc.com or Ed Perry at (812) 299-0233 or edperry@customblenders.net.

Sincerely,

A handwritten signature in black ink that reads "Jacki Congleton". The signature is written in a cursive, flowing style.

Jacki Congleton
Project Manager
Terra Consulting, LLC

Enclosure

Cc: Ed Perry, Custom Blenders Arkansas, LLC

ADEQ

Arkansas Department of Environmental Quality

AIR DIVISION

AIR PERMIT APPLICATION FORMS

July 2012

GENERAL INFORMATION APPLICATION FORMS

(Complete this General Information section for all Registrations and Applications)

1. FACILITY PHYSICAL INFORMATION			
Facility Name:	Custom Blenders Arkansas, LLC		
Physical Address or Location:	14000 Dineen Drive		
City:	Little Rock		
County:	Pulasky		
Zip:	72206-5818		
Contact First Name:	Ed	Contact Last Name:	Perry
Contact Position:	President		
Contact Phone:	812-299-0233	Contact FAX:	812-299-3774
Contact Email Address:	edperry@customblenders.net		

2. FACILITY MAILING INFORMATION			
Organization Name:	Custom Blenders Arkansas, LLC		
Mailing Address :	14000 Dineen Drive		
City:	Little Rock		
State:	Arkansas		
Zip:	72206-5818		
Contact First Name:	Ed	Contact Last Name:	Perry
Contact Phone:	812-299-0233	Contact FAX:	812-299-3774
Contact Email Address:	edperry@customblenders.net		

3. INVOICE MAILING INFORMATION			
Organization Name:	Custom Blenders Arkansas, LLC		
Mailing Address:	9766 S. Carlisle Street		
City:	Terre Haute		
State:	Indiana		
Zip:	47802		
Invoice First Name:	Ed	Invoice Last Name:	Perry
Invoice Phone Number:	812-299-0233	Invoice FAX:	812-299-3774
Invoice Email Address:	edperry@customblenders.net		

4. PERMIT APPLICATION CONTACT INFORMATION			
Organization Name:	Custom Blenders Arkansas, LLC		
Mailing Address:	9766 S. Carlisle Street		
City:	Terre Haute		
State:	Indiana		
Zip:	47802		
Applicant First Name:	Ed	Applicant Last Name:	Perry
Applicant Phone Number:	812-299-0233	Applicant FAX:	812-299-3774
Applicant Email Address:	edperry@customblenders.net		

GENERAL INFORMATION APPLICATION FORMS

5. UTM Coordinates of Center of Plant					
UTM Zone (15 or 16)	15				
UTM North (to the nearest meter)	3831586N				
UTM West (to the nearest meter)	567188 E				
Datum System (indicate only one)					WGS 84

6. NAICS Information	
NAICS Number:	311119
NAICS Title:	Other Animal Feed Manufacturing

7. Type of Permit (check one):					
<input checked="" type="checkbox"/>	Air Permit Registration	<input type="checkbox"/>	Minor Source Permit	<input type="checkbox"/>	Title V/Major Source Permit

8. Type of Permit Application (check one):			
	Initial Permit For Existing Facility Without A Current Permit		
<input checked="" type="checkbox"/>	Initial Permit For New Facility Or New Minor Source/Title V Facility With Current Registration/Permit	List Any Current Permits #:	
	Renewal Of Existing Permit (Title V Permits Only)	List Current Permit # And Expiration Date:	
	Minor Modification/De Minimis	List Current Permit #:	
	Significant Modification	List Current Permit #:	
	Administrative Amendment	List Current Permit #:	
	Name Change	List Current Permit #:	
	Transfer Of Ownership	List Current Permit #:	

9. Date of Commencement of Construction or Reconstruction:	
Expected Date of Commencement of Construction or Reconstruction:	November 1, 2013
Expected Date of Completion of Construction or Reconstruction:	December 01, 2013
Anticipated Date of Operation:	November 15, 2013

GENERAL INFORMATION APPLICATION FORMS

General Application Questions		
	Yes	No
10. Has a Disclosure Statement been submitted to the Department previously? (If no, attach a disclosure statement)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Is any source subject to a NSPS (40 CFR Part 60) or NESHAP (40 CFR Part 61 or 63) requirement? If yes, list subparts _____ For any new or modified source affected by a subpart include a detailed list of the applicable sections of the subpart.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Would you like to subscribe to the Air Permit Branch Email list? (A periodic email from the ADEQ Air Permit Branch of notable events and issues relating to air permits and permitting.) If yes, list the email address(es) you wish to use: <u>jacki@terraconsultingllc.com</u> (or you can email us at <u>AirPermits@adeq.state.ar.us</u> with "subscribe" (no quotation marks) in the subject box.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

13. Organizational Status Of Applicant

a. Please check the box which appropriately describes the legal organization of the applicant.

	Solely Owned Proprietorship	<input checked="" type="checkbox"/>	Corporation
	General Partnership	<input type="checkbox"/>	Joint Venture
	Limited Partnership	<input type="checkbox"/>	Government Entity
	Other (Specify)	<input type="checkbox"/>	

b. If the applicant is a corporation, indicate if it is a domestic (Arkansas) corporation or a foreign (chartered outside of Arkansas) corporation.

Domestic Foreign

c. If the applicant is a corporation, is it currently registered to do business with the Arkansas Secretary of State?

YES (indicate SOS filing number) NO

(Please note no permit will be issued to a corporation until the proper documents have been filed with the Secretary of State. Also, note that the name of the applicant must be identical to the name of the registered corporation.)

GENERAL INFORMATION APPLICATION FORMS

d. If the applicant is organized as a partnership, then list the names and addresses of all partners involved. Attach additional sheets if necessary.

e. If the applicant is organized as a joint venture, list the names and addresses of all of the principals involved. Attach additional sheets if necessary.

END OF GENERAL INFORMATION APPLICATION FORMS
GO TO REGISTRATION, MAJOR SOURCE APPLICATION FORMS OR
EMISSION RATE TABLE AND OTHER FORMS

REGISTRATIONS

(Complete this section for Registration applications only. Otherwise, skip to the next section.)

14. Provide a description of the facility, processes and sources of air pollution emissions. Also include a Process Flow Diagram. Attach additional pages if necessary.

See Attachment A - Process Description and Attachment B -Flow Diagram

15. What are the total **actual** emissions from this facility?

Pollutant	Tons per year	Eligible TPY limits
PM	5.70	≥ 15 and < 25
PM ₁₀	1.54	≥ 10 and < 15
SO ₂	0.02	≥ 25 and < 40
VOC	38.48	≥ 25 and < 40
CO	2.78	≥ 40 and < 75
NO _x	3.31	≥ 25 and < 40
Single HAP	0.000002	≥ 1 and < 2
Combination HAP	0.000002	≥ 3 and < 5
Air Contaminants		< 25
Lead	0.00	< 0.5

16. Provide a detailed explanation of how the emissions estimate was determined e.g. AP-42, test information, etc. Attach additional pages if necessary.

Combustion emissions calculated using AP-42, 1.4 Natural Gas Combustion, Tables 1.4-1 (Small Boilers<100 MMBtu) and 1.4-2.
PM emissions from drying material calculated using emission factors based on emissions test at two similar plants operated by Custom Blenders. Stack test results in Attachment H-1.
PM10 & PM2.5 emissions from drying material calculated based on research cited in AP-42, 9.9.1.1.5 Animal Feed Mills
VOC emissions from drying material are calculated based on emissions testing at a similar plant. Stack test results in Attachment H-2.
See attached <i>Additional Information</i> for additional emissions details.

Fugitive Emissions

PM Emissions from Finishing Screen (FS01)

Controlled by Cyclone 2

Emission Type	Emission Factor (lb/ton) ¹	Emission Rates ²		
		Actual Emissions (lb/hr)		Actual Emissions (tons/yr)
PM	0.075	1.35		3.09
PM10	0.019	0.342		0.78
PM2.5	0.0032	0.06		0.13

(1) Emission Factors based on AP-42 Chapter 9.9.1 Grain Elevators and Processes Table 9.9.1-1

(2) Emission rates include maintenance, startup and shutdown emissions.

PM Emissions from Hammermill (H01)

Emission Type	Emission Factor (lb/ton) ¹	Emission Rates ²		
		Actual Emissions (lb/hr)		Actual Emissions (tons/yr)
PM	0.067	1.206		2.76
PM10	0.034	0.612		1.40
PM2.5	0.011	0.198		0.45

(1) Emission Factors based on AP-42 Chapter 9.9.1 Grain Elevators and Processes, Table 9.9.1-2

(2) Emission rates include maintenance, startup and shutdown emissions.

PM from Receiving Raw Material (R01)

Emission Type	Emission Factor (lb/ton) ¹	Actual Emissions (lb/hr)	Actual Emissions (tons/yr)	
PM	0.017	0.306		0.70
PM10	0.0025	0.05		0.10
PM 2.5	0.0025	0.05		0.10

(1) Emission Factors based on AP-42 Chapter 9.9.1 Grain Elevators and Processes, Table 9.9.1-2

PM from Shipping Finished Product (L01)

Emission Type	Emission Factor (lb/ton) ¹	Actual Emissions (lb/hr)	Actual Emissions (tons/yr)	
PM	0.0033	0.06		0.14
PM10	0.0008	0.01		0.03
PM 2.5	0.0008	0.01		0.03

(1) Emission Factors based on AP-42 Chapter 9.9.1 Grain Elevators and Processes, Table 9.9.1-2

Diesel Fuel Storage Tank (T01)

Emission Type	% of Diesel fuel by weight*	Breathing Loss (lb/yr)**	Breathing Emissions (lb/yr)	Working Loss (lb/yr)**	Working Emissions (lb/yr)	Total Emissions (lb/yr)	Total Emissions (tons/yr)
VOC	10.00%	0.2100	0.0210	0.4800	0.0480	0.0690	0.0000345
Single HAP (Naphthalene)	0.50%	0.2100	0.0011	0.4800	0.0024	0.0035	0.000001725
Total HAP	0.50%	0.2100	0.0011	0.4800	0.0024	0.0035	0.000001725

* Per Marathon No. 2 Diesel MSDS 029MAR019

** Loss values from TANKS 4.0 (Report in Attachment I)

Plant Wide Emissions

Emission Type	Actual Emissions (lb/hr)	Actual Emissions (tons/yr)
VOC	16.82	38.48
SO2	0.01	0.02
CO	1.22	2.78
NOx	1.45	3.31
PM	2.49	5.70
PM10	0.67	1.54
PM2.5	0.51	1.17
Lead	0.00	0.00
Single HAP (Naphthalene)	0.0035	0.000002
Total HAP	0.0035	0.000002

Production Assumptions:

	Actual ²
Hours per day	16
Days per week	5.5
Weeks per year	52
Hours per year	4576
Production tons per hour	18
Annual production	82368
Monthly Production	6652.8
Rotary Dryer	
	Actual
Heat input (MMBtu/hr)	15
Fuel Consumption (scf/hr) ¹	14,465
Fuel Consumption (scf/m)	241
Fuel Type	Natural Gas

(1) 1,028 Btu/scf of natural gas per AP-42

(2) Actual = Anticipated actual conditions and emissions

Combustion Emissions (D01)

Emission Type	Emission Factor (lb/10 ⁶ scf) ¹	Emission Rates ²		
		Actual Emissions (lb/hr)		Actual Emissions (tons/yr)
VOC	5.5	0.08		0.18
SO2	0.60	0.01		0.02
CO	84.00	1.22		2.78
NOx	100.00	1.45		3.31
PM	7.60	0.11		0.25
PM10	7.6	0.11		0.25
PM2.5	7.6	0.11		0.25
Lead	0.0005	0.00		0.00
HAPs	0	0.00		0.00

(1) Emission Factors based on AP-42, 1.4 Natural Gas Combustion, Tables 1.4-1 (Small Boilers <100MMBtu) and 1.4-2

(2) Emission rates include maintenance, startup and shutdown emissions.

Emissions from Drying Material (non-combustion)(D01)

Emission Type	Emission Factor (lb/ton) ¹	Emission Rates ²		
		Actual Emissions (lb/hr)		Actual Emissions (tons/yr)
PM	0.112	2.016		4.61
PM10 ⁴	0.028	0.504		1.15
PM2.5 ⁴	0.019	0.342		0.78
VOC ³	0.93	16.74		38.30

(1) PM Emission Factor based on emissions tests at two similar plants see attached stack test results (Attachment H)

(2) Emission rates include maintenance, startup and shutdown emissions.

(3) Emissions Factor based on emissions testing at a similar plant see attached stack test results (Attachment H)

(4) PM10 and PM2.5 Emissions Factors calculated based on research cited in AP-42 9.9.1.1.5 Animal Feed Mills

Total Emissions from Stack 1 (S01)

Emission Type	Actual Emissions (lb/hr)	Actual Emissions (tons/yr)
VOC	16.82	38.48
SO2	0.01	0.02
CO	1.22	2.78
NOx	1.45	3.31
PM	2.13	4.86
PM10	0.61	1.40
PM2.5	0.45	1.03
Lead	0.00	0.00
HAPs	0.00	0.00