

STATE OF MISSOURI

PERMIT 3001



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 122013-001

Project Number: 2013-09-013
Installation Number: 021-0016

Parent Company: Lifeline Foods, Inc.

Parent Company Address: 2811 South 11th Street, St. Joseph, MO 64503

Installation Name: Lifeline Foods, Inc.

Installation Address: 2811 South 11th Street, St. Joseph, MO 64503

Location Information: Buchanan County, S20, T57N, R35W

Application for Authority to Construct was made for:
Modify the existing plant to incorporate additional equipment for new milling technology.
This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

DEC - 3 2013

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Lifeline Foods, Inc.
Buchanan County, S20, T57N, R35W

1. **Superseding Condition**
The conditions of this permit supersede the following special conditions found in the previously issued construction permit (Permit #122011-013A¹) issued by the Air Pollution Control Program:
 - A. Special Condition 3. Operational Limits
 - B. Special Condition 2. Emission Limitations, D. Particulate Matter less than 10 microns in diameter (PM₁₀)
 - C. Special Condition 5. Control Device Requirement-Baghouse
 - D. Special Condition 6. Control Device Requirements for Existing Baghouses

2. **Operational Limits (replaces Permit #122011-013A, special condition 3.)**
 - A. Lifeline Foods, Inc. shall not exceed the daily and annual receipt and/or shipping limits as follows:

Material	Annual Limit (tons)	Daily Limit (tons)
Denaturant	3,300	27
Denatured Ethanol	165,000	560
Grain Receiving (to Pit #1 or Pit #2)	1,133,333	6,020
Dry Distillers Grain Solids (DDGS)	35,640	450
Corn oil/caustic/acid	10,100	150
Wet DGS	158,400	800
Carbon Dioxide (CO ₂)	24,455	150

- B. To demonstrate compliance with Special Condition 2.A., Lifeline Foods,

¹ The special condition in permit 122011-013A (7.) that contains the performance testing of certain emission units of that permit is not being superseded by this permit and so, remains in effect. However, all the performance testing for the special conditions have been performed.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Inc. shall keep a record of the daily weight (tons) of material received and/or shipped. Attachment F, or equivalent form(s), shall be used for this purpose.

3. Emission Limitations (replaces Permit #122011-013A, special condition 2.D.) Particulate Matter less than 10 microns in diameter (PM₁₀) Lifeline Foods, Inc. shall not discharge PM₁₀ into the atmosphere from the following stacks in excess of the listed amounts:

Emission Point	Description	pounds per hour
S11	Gas Dryer with RTO	1.512
S30	Corn Hammermill	0.342
S31	Hammermill Receiver	0.154
S32	Bran Hammermill	0.411
S33	DDGS Receiver	0.967
S10	Dryers and RTO	0.947
S37	New Mill Baghouse	0.47
S40	Fermentation Scrubber	0.2300
S106	Natural Gas Boiler	0.615
S104	Bran Storage	0.035
S101	Degermer Baghouse	0.183
S120	Anderson Dryer	0.091
S121	Anderson Cooler	0.114
SANDJ	Source "J" Units-Aux Corn Mill	1.189
S20	Grain Unloading Baghouse	0.20

4. Control Device Requirement-Baghouse (replaces Permit #122011-013A, special condition 5.)

- A. As specified in the permit application, the baghouse listed below must be in use at all times when the associated equipment is in operation and operated at or below the stated flow rate and grain loading:

Emission Point	Emission Unit controlled	Flow Rate (standard cubic feet per minute)	Grain Loading (grains per standard cubic feet)
S37	New Milling Baghouse	10,000	0.004

- B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.

- C. Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- D. Lifeline Foods, Inc. shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours of operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- E. Lifeline Foods, Inc. shall maintain an operating and maintenance log for the baghouses which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Control Device Requirements for Existing Baghouses (replaces Permit #122011-013A, special condition 6.)

The following baghouses shall be operated and maintained at or below the following flow rates and grain loadings:

Emission Point	Emission Unit controlled	Flow Rate (scfm)	Grain Loading (grains/scf)
S30	Corn Hammermilling	10,000	0.004
S31	Hammermill Receiving (Slurry)	4,500	0.004
S32	Bran Hammermilling	12,000	0.004
S33	DDGS Receiver	28,200	0.004
S104	Bran Storage	1,000	0.004
S101	Degermer Baghouse	20,000	0.003
S120	Anderson Dryer	3,000	0.004
S121	Anderson Cooler	4,000	0.004
S71	Germ Cooler Cyclone	10,000	0.003
SANDJ	Source "J" Units-Aux Corn Mill	187,500	0.0015

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

6. **Ambient Air Quality Impact Analysis:**
The permittee must submit any change to the facility that would change the release parameters and/or emission rates contained in Attachment E, Tables 1 and Attachment F, Table 2, to the permitting authority for review. If the permitting authority determines that the changes are significant, the facility will be required to submit an updated ambient air quality impact analysis (AAQIA) that demonstrates compliance with the national ambient air quality standards (NAAQS) and ambient air increment standards.
7. **Record Keeping and Reporting Requirements**
 - A. Lifeline Foods, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - B. Lifeline Foods, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2013-09-013
Installation ID Number: 021-0016
Permit Number:

Lifeline Foods, Inc.
2811 South 11th Street
St. Joseph, MO 64503

Complete: September 10, 2013

Parent Company:
Lifeline Foods, Inc.
2811 South 11th Street
St. Joseph, MO 64503

Buchanan County, S20, T57N, R35W

REVIEW SUMMARY

- Lifeline Foods, Inc. has applied for authority to make these modifications: new stacks and equipment have been incorporated into the emissions and modeled for new milling equipment and technology; daily haul road limits have been modified to account for an increased need in daily limits; DDGS increased to 250 tons per day; corn oil/caustic/acid increased to 150 tons per day; wet DGS increased to 800 tons per day; and, CO₂ increase to 150 tons per day.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed modifications.
- None of the New Source Performance Standards (NSPS) apply to the proposed modifications.
- None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed modifications.
- Baghouses are being used to control the particulate matter less than 10 microns in diameter (PM₁₀) emissions from the new equipment that vents to atmosphere.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM₁₀ are below the de minimis levels.
- This facility is located in Buchanan County, an attainment area for all criteria pollutants.
- This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation is currently classified as *Chemical process plants* in Missouri. The installation's major source level is 100 tons per year and

fugitive emissions are counted toward major source applicability.

- Ambient air quality modeling was performed to determine the ambient impact of PM₁₀.
- Emissions testing is not required for the equipment.
- Any necessary revisions to the Intermediate Operating Permit renewal application are required to be submitted within sixty (60) days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Lifeline Foods, Inc. (Lifeline) is a cereal manufacturing plant located in St. Joseph, Missouri. Refer to Attachment A to this report for a detailed aerial photograph of the facility. Locally grown grains are milled and processed into food products and ingredients for various companies. Lifeline also operates an ethanol manufacturing plant on the same site, which uses the byproduct of the cereal process to produce ethanol. This ethanol plant is capable of producing 50 million gallons of denatured ethanol annually.

ICM IBR (021-0125) was issued a construction permit (Permit 062010-009A) for the construction of a 260,000 gallon per year fuel ethanol production facility. The process converts cellulosic materials (renewable biomass) to fuel ethanol through a natural fermentation process. ICM IBR has constructed this operation on leased land located at the Lifeline property. Although ICM IBR will manage the cellulosic ethanol production facility independently of Lifeline's grain ethanol production facility, ICM IBR has 49 percent ownership of Lifeline which qualifies as common control of the two facilities. The two facilities are considered the same installation for construction and operating permit purposes, and the limits associated with the ICM IBR facility are shared with the Lifeline's grain ethanol production site.

Therefore, Lifeline Foods and ICM IBR facilities share the plant-wide level limits endemic of Intermediate State Installations for all regulated pollutants, which the facilities have the potential to emit greater than the major source levels.

Lifeline Foods and ICM IBR facilities are considered a single, minor installation under construction permits. Lifeline was issued a Part 70 Operating Permit in 2000. However, an Intermediate Operating Permit application is currently under review (Project #2009-05-008).

The following construction permits have been issued to Lifeline from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0686-003	Two (2) boiler replacements
1289-002	Installation of two (2) cereal manufacturing lines
0790-004	Installation of additional dry and wet dust collecting systems
0791-007	Installation of two hammermills and baghouses replacements
0596-002	Modification to the ingredient transfer system
112001-006	Installation of three (3) dryers and three (3) coolers for the corn milling operation
082007-017	Installation of a 50 million gallon per year denatured ethanol plant
082007-017A	Amendment to revise emission rates from original permit
082009-010	Installation of a pilot plant
082009-010A	Extension of permit
122011-013	Construction of two hammermills, a natural gas dryer and regenerative thermal oxidizer, and equipment associated with the Polar Process.
122011-013A	Amendment

PROJECT DESCRIPTION

The Lifeline Foods ethanol facility will receive grain by mechanical conveyor from the existing Lifeline Foods grain elevator storage bins. From storage, the grain goes directly to the Dry Milling process for grain cleaning with dust emissions controlled by a baghouse. After the grain is cleaned, water is added as part of a tempering process which raises the moisture content of the corn to facilitate germ and bran release. The tempered corn is then conveyed to the degermers where the corn is split into germ, starch and bran with dust emissions controlled by a baghouse. The starch, bran and germ are conveyed to a graders that separates the materials. Part of the graded materials is sent to Lifeline Foods for processing with the fine endosperm being returned to the fermentation slurry tank. The other part of the graded materials is sent to aspirators and cyclones to separate bran from germ and endosperm with dust emissions controlled by a baghouse.

The grain materials continue through processes where it is roller milled and sifted into different sizes of materials, germ and endosperm, with the endosperm being sifted into fine and coarse fractions. The germ is sent to fermentation or sold as feed. During sifting, all starch particles are detached. The endosperm and bran can be sent to the slurry tank for utilization in fermentation to ethanol.

The Lifeline Foods facility proposed to install four new pieces of equipment. Three of the new pieces (S34, S35 and S36) all vent interior to the building with no vent to the atmosphere. One new mill (S37) vents to the atmosphere through a baghouse. Several other existing pieces of equipment will experience an increase in emissions. However, Lifeline Foods facility is only increasing the daily limits on their emissions, not

the annual emission limitations. The existing emission units or fugitive sources are: S104, SANDJ, S11, S30, S31, S32, S33, DDGS Roads, Corn oil/caustic/Acid Roads, WDGS Roads and CO2 Roads.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, or Performance Testing results. Refer to Attachment C to this report for a more detailed process flow diagram of the pertinent processes.

Potential to emit is defined as the emission rates of any pollutant at maximum design capacity. Annual potential shall be based on the maximum annual-rated capacity of the installation assuming continuous year-round operation. Federally-enforceable permit conditions on the type of materials combusted or processed, operating rates, hours of operation, and the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential.

Since any new equipment listed in the application does not have any federally enforceable permit conditions yet, the potential to emit of the application does not consider control devices in the application for new equipment. This application includes some existing equipment increases that do have required control equipment. Those pieces are considered for the potential to emit.

The following table provides an emissions summary for this project. Refer to Attachment B to this report for a more detailed PM₁₀ emissions calculation report. Existing potential emissions were taken from construction permit 122011-013, DNR project 2011-11-045. Existing actual emissions were taken from the installation's 2012 MoEIS (EIQ). The Installation potential to emit of the permit (e.g. after the federally enforceable conditions are in place) considers all the control devices required.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2012 EIQ)	Project Potential to Emit of the Application	Facility Potential to Emit of the Permit
PM ₁₀	15.0	N/D ²	7.26	48.02	63.10
PM _{2.5}	10.0	N/D	7.26 ³	48.02	63.10
SO _x	40.0	94.4	0.05	N/A ⁴	94.4
NO _x	40.0	86.3	8.45	N/A	86.3
VOC	40.0	<100.0	0.46	N/A	<100.0
CO	100.0	<100.0	7.10	N/A	<100.0

² Not determined, the *after* permit potential to emit is given

³ All PM₁₀ are considered PM_{2.5}.

⁴ Not applicable

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2012 EIQ)	Project Potential to Emit of the Application	Facility Potential to Emit of the Permit
GHG (CO ₂ e)	75,000/ 100,000	29,973	⁵ –	N/A	29,973
GHG (mass)	0.0/ 100.0/ 250.0	N/D	⁶ –	N/A	N/D
HAPs	10.0/25.0	<10.0/25.0	6.80	N/A	<10.0/25.0
Acrolein	0.04	0.24	N/A	N/A	0.24

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of Particulate Matter less than 10 microns in diameter (PM₁₀) are below de minimis levels.

APPLICABLE REQUIREMENTS

Lifeline Foods, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

⁵ GHGs are not required to be reported to the Air Pollution Control Program.

⁶ GHGs are not required to be reported to the Air Pollution Control Program.

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of PM₁₀ at the significance level. The modeling was performed because of the past history of refined modeling.

To determine whether the proposed changes would have a significant PM₁₀ increase, the following table shows the emission increases that were modeled:

Source	Emissions		
	Previous (lb/hr)	Proposed (lb/hr)	Increase (lb/hr)
S104	1.50E-02	3.50E-02	2.00E-02
SANDJ	4.57E-01	1.19E+00	7.32E-01
S11	1.13E+00	1.51E+00	3.86E-01
S30	3.00E-01	3.42E-01	4.20E-02
S31	1.35E-01	1.54E-01	1.90E-02
S32	3.60E-01	4.11E-01	5.10E-02
S33	8.46E-01	9.67E-01	1.21E-01
S37 (new)	--	4.70E-01	4.70E-01
DDGS Roads	3.58E-03	6.88E-03	3.30E-03
Corn oil/caustic/Acid Roads	5.73E-04	8.60E-04	2.87E-04
WDGS Roads	2.58E-03	4.59E-03	2.01E-03
CO2 Roads	4.49E-03	2.02E-02	1.57E-02

The AAQIA contained the following paragraph in summary:

PM₁₀

Table 5, entitled "Lifeline Foods, LLC-PM₁₀ Significant Impact Area Determination," summarizes the high first high concentrations as predicted by the AERMOD dispersion model for PM₁₀. The maximum 24-hour impacts occurred during the 2005 meteorological period with a concentration of 4.546 µg/m³. The maximum annual impact occurred during the 2007 meteorological period with a concentration of 0.897 µg/m³. Based upon the project emissions, the facility had less than significant impacts for both the 24-hour and annual averaging periods; as such, no further analysis is necessary and the study is considered complete.

The significance modeling demonstrated that the proposed changes would not exceed the significance level for PM₁₀. Therefore, no further modeling is required of the proposed changes. Refer to the attached air quality analysis for more details regarding the air quality modeling effort.

No previous air quality monitoring was required and the results of this modeling indicate nothing has changed significantly to warrant monitoring now.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Randy Raymond
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 9, 2013, received September 10, 2013, designating Lifeline Foods, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment A – Location of S37



Attachment B – Particulate Emission Calculations

Annual Emissions Calculations for All Permitted Equipment													
Emission Point ID	Modeled ID	Description	MHDR		Emission Factor			Control Device		Comment	Emission Rate		
			value	unit	value	units	source	Description	Control Efficiency		lb/hr	tpy	
S10	S10	Dryers and RTO					testing	Thermal Oxidizer			0.9475	4.150	
S40	S40	Fermentation Scrubber					testing	Scrubber			0.2300	1.007	
S104	S104	Bran Storage					testing	Baghouse		increase for testing	0.035	0.153	
S105	S105	Ash Storage								This source being removed	0	0.000	
S106		Boiler (Previously Syn Gas Boiler)	82.5	MMBTU	0.00745	lb/MMbTU	AP-42 Sect 1.4	none		NG only	0.615	2.69	
S80	CTC1	Cooling Tower Cell 1	1,350,000	gal	2.1E-07	lb/gal	AP-42 Sect. 13.4				0.2815	1.233	
	CTC2	Cooling Tower Cell 2								0.093825			
	CTC3	Cooling Tower Cell 3											
S101	S101	Degermer Baghouse					testing	Baghouse			0.1826	0.800	
S120	S120	Anderson Dryer					testing	Baghouse			0.0913	0.400	
S121	S121	Anderson Cooler					testing	Baghouse			0.1142	0.500	
	RD1	Haul Road	5.03	vmt	0.03	lb/vmt	AP-42 Sect. 13.2.1	paved, wash		0.5 g/m3 silt loading	0.1730	0.758	
	ASHMLD	Ash Storage/Loadout	0.34	ton	0.46	lb/ton	AP-42 Sect.11.12	fugitive	5%	% fugitive, limit 3000 tpy	0.0079	0.035	
		Lime Storage /Handling	0.08	ton	0.15	lb/ton	AP-42 Sect.11.12	fugitive	5%	% fugitive, limit 700 tpy	0.0006	0.003	
	H01	Grain By-Product Rail Loadout						fugitive			0.1444	0.632	
S110*	K01	Boiler #1, #2 Combo	173.7	MMBTU	0.0076	lb/MMBTU	AP-42 Sect. 1-4			K01 is a combination of three boilers (90, 53.8 and 29.9 MMBTU/hr). The same stack parameters were used for all three boilers.	1.3201	5.782	
	SCALPER	Scalper	66.59	ton	0.019	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	removed per applicant*	0.0000	0.000	
	DDGLDT1	Fugitive DDGS Storage	18.52	ton	0.0063	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, limit 162218 tpy	0.0058	0.026	
SANDJ	SANDJ	Source "J" Units-Aux Corn Mill					testing	Baghouse		increase for testing	1.1890	5.208	
		Fugitive 2ns Receiving Pit	129.38	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, limit 1133333 tpy	0.0505	0.092	
	S20	2nd Receiving Pit	840	ton			testing	Baghouse			0.2	0.876	
G02	G02	Grain Elevator	100.00	ton	0.034	lb/ton	AP-42 Sect.9.9.1	Baghouse	99%	* Based on a maximum of 1,133,333 tons per year	0.0340	0.149	
G03	G03	Grain Elevator	125.00	ton	0.034	lb/ton	AP-42 Sect.9.9.1	Baghouse	99%		0.0425	0.186	
G04	G04	Grain Elevator	75.00	ton	0.034	lb/ton	AP-42 Sect.9.9.1	Baghouse	99%		0.0255	0.112	
G06	G06	Grain Elevator	110.00	ton	0.034	lb/ton	AP-42 Sect.9.9.1	Baghouse	99%		0.0374	0.164	
G07	G07	Grain Elevator	75.00	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	Baghouse	99%		0.0059	0.011	
DOOR2	DOOR2	Fugitive Receiving Dry Fract	129.38	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%		% fugitive, limit 1133333 tpy	0.0505	0.092
New													
S37		New Mill Baghouse	13600.00	scfm	0.004	gr/scfm	mass balance	baghouse			0.47	2.042	
S36		Bin vent bag bin	635.00	scfm	0.004	gr/scfm	mass balance	baghouse		vent inside	0.02	0.095	
S34		bin vent bin 34C	425.00	scfm	0.004	gr/scfm	mass balance	baghouse		vent inside	0.01	0.064	
S35		bin vent bin 35C	425.00	scfm	0.004	gr/scfm	mass balance	baghouse		vent inside	0.01	0.064	

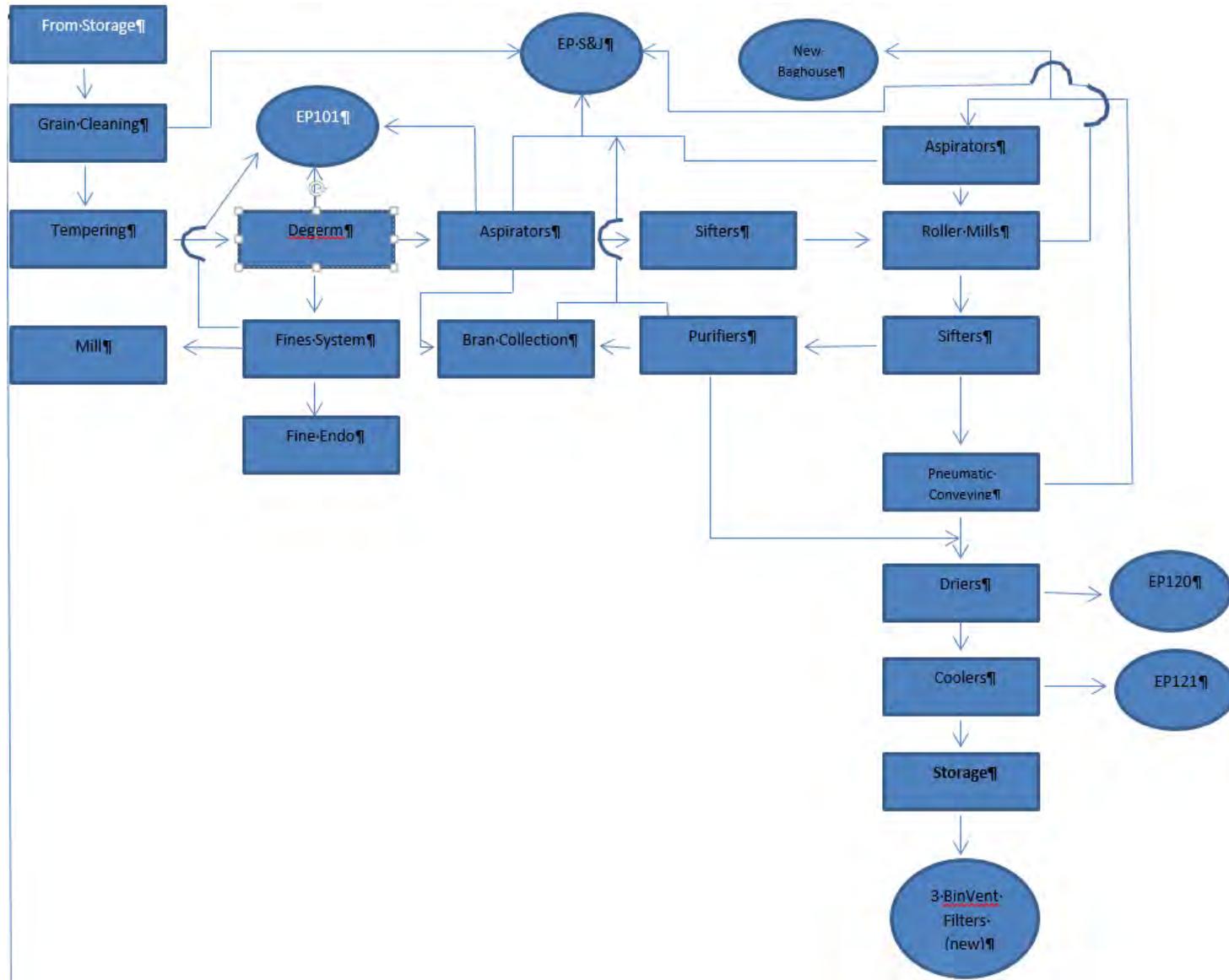
Attachment B – Particulate Emission Calculations (continued)

Existing Mill equipment												
S11	Gas dryer Rto									Increased and included	1.5120	6.623
S30	Hammermill Baghouse	10000.00	scfm	0.004	gr/scfm	mass balance	baghouse			included	0.343	1.502
S31	Hammermill Rec. BH	4500.00	scfm	0.004	gr/scfm	mass balance	baghouse			included	0.154	0.676
S32	Ground Bran Rec BH	12000.00	scfm	0.004	gr/scfm	mass balance	baghouse			included	0.411	1.802
S33	DDGS Filter Receiver BH	28200.00	scfm	0.004	gr/scfm	mass balance	baghouse			included	0.967	4.235
I29	RTE LINE 1 HOT CYCLONE	3 TON		0.05976				70%			0.0538	0.236
I29	RTE LINE 1 HOT CYCLONE	0.0043 TON		7.6							0.0327	0.143
I26	Extruder Dust collection	2.325 TON		16.926				99%			0.3935	1.724
I08	HEX BINS-RAILCAR FLOUR LOADOUT	3 TON		0.5							1.5	6.570
I06	HEX BINS-RAILCAR UNLOADING	4 TON		0.5				99%			0.02	0.088
E06	Aux Mill	7.5 TON		1.5				99%			0.1125	0.493
D03	Extruder Grinder	1.5 TON		1.5				99%			0.0225	0.099
C09	CORN MILL HOMINY GRINDER	7.5 TON		3.7				99%			0.2775	1.215
C01	CORN MEAL PACKAGING	20 TON		0.75				99%			0.15	0.657
A05 **	MASA CORN Gravity Table Filter	3.5 TON		3.7				99%			0.1295	
A04 **	MASA CORN 3 Deck Screener/Destoner Filter	3.5 TON		3.7				99%			0.1295	
A03 **	Masa Clean Corn Bin Relief & Screen Grinder	3.5 TON		2.5				99%			0.0875	
A02 **	MASA CORN FLOUR PROCESSING-GRINDER	4.25 TON		2.5				99%			0.1063	
A02 **	MASA CORN FLOUR PROCESSING-GRINDER	0.005714 E6FT3		12							0.0686	
A01 **	Masa Corn Flour Secondary Grinder Filter	6 TON		2.5				99%			0.15	
A01 **	Masa Corn Flour Secondary Grinder Filter	6 TON		2.5				91%			1.35	
A06	A01-A05 combined										2.0213	8.853
* According to applicant, the scalper is totally enclosed and vented to the receiving pit baghouse. Therefore this point was removed.											16.2935	62.2393
** All J sources combined into one emission point called SandJ for modeling purposes.												
** For modeling purposes, A01-A05 were combined into one emission point called A06												

Attachment B – Particulate Emission Calculations (continued)

Daily Emissions Calculations for All Permitted Equipment Based on 24 hours of operation												
Emission Point ID	Modeled ID	Description	MHDR		Emission Factor			Control Device		Comment	Emission Rate	
			value	unit	value	units	source	Description	Control Efficiency		lb/hr	tpy
	DDGLDT1	Fugitive DDGS Storage	4.17	ton	0.0063	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, limit 100 tpd	0.0013	0.006
		Fugitive for 2nd Receiving Pit	250.83	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, 6020 tpd	0.0978	0.428
DDDR3 and	DDDR2	Fugitive Receiving Dry Fract (harvest)	250.83	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, 6020 tpd	0.0978	0.428
Daily Emissions Calculations for All Permitted Equipment Based on 10 hours of operation												
Emission Point ID	Modeled ID	Description	MHDR		Emission Factor			Control Device		Comment	Emission Rate	
			value	unit	value	units	source	Description	Control Efficiency		lb/hr	tpy
	DDGLDT1	Fugitive DDGS Storage	10.00	ton	0.0063	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, limit 100 tpd	0.0032	0.006
		Fugitive for 2nd Receiving Pit	602.00	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, 6020 tpd	0.2348	0.428
DDDR3 and	DDDR2	Fugitive Receiving Dry Fract (harvest)	602.00	ton	0.0078	lb/ton	AP-42 Sect.9.9.1	fugitive	5%	% fugitive, 6020 tpd	0.2348	0.428
Items in Gold are taken from EIQ												

Attachment C – Buhler Corn Mill Process Flow



Attachment D: Table 1

Table 1																		
LifeLine Foods, LLC-Point Source Emission Rates and Stack Parameters																		
ERI Solutions, Inc. Emission Rate Submittal																		
PM ₁₀ Only Pollutant Modeled																		
Consultant Provided Significant Impact Analysis for Proposed Project/Modification																		
New Milling Technology, Stack Test Adjustments for S104, SANDJ, and S11, Inclusion of Previously Removed Sources																		
Stack Driven Releases																		
Emission Unit I.D.	Model I.D.	Description	Release Type	Easting	Northing	Elevation	Emission Rate		Stack Height		Stack Temperature		Stack Exit Velocity		Stack Diameter		Altered from Project 2012-03-011?	
							(Grams/Second)	(Lbs/Hour)	(Meters)	(Feet)	(Kelvin)	(Fahrenheit)	(Meters/Second)	(Feet/Minute)	(Meters)	(Feet)	(Yes)	(No)
<i>Emission Rates for Use in the Significant Impact Analysis- Project Only-24-Hour and Annual</i>																		
S104	S104	Bran Storage	POINT	341881.00	4400371.00	257.00	2.5200E-03	2.0000E-02	33.53	110.00	292.59	66.99	14.54	2862.01	0.20	0.67	X	
SANDJ	SANDJ	Source "J" units (J01, J02, J03, J04, J05, J06, J08, J09, J10)	POINT	341873.00	4400446.00	257.70	9.2230E-02	7.3200E-01	49.38	162.00	302.59	84.99	26.03	5124.02	0.76	2.50	X	
S30	S30	Corn Hammermilling	POINT	341833.00	4400440.00	256.03	5.2919E-03	4.2000E-02	38.10	125.00	293.00	67.73	16.17	3183.07	0.61	2.00	X	
S31	S31	Hammermill Receiving (Slurry)	POINT	341836.00	4400440.00	256.03	2.3940E-03	1.9000E-02	42.67	139.99	293.00	67.73	18.63	3667.32	0.38	1.25	X	
S32	S32	Bran Hammermilling	POINT	341905.00	4400435.00	256.03	6.4259E-03	5.1000E-02	42.67	139.99	293.00	67.73	16.17	3183.07	0.61	2.00	X	
S33	S33	DDGS Receiver	POINT	341884.00	4400383.00	256.95	1.5246E-02	1.2100E-01	38.10	125.00	293.00	67.73	20.27	3990.16	0.91	2.99	X	
S11	S11	Gas Dryer/RTO	POINT	341847.00	4400370.00	256.03	4.8635E-02	3.8600E-01	38.10	125.00	293.00	67.73	11.81	2324.80	2.13	6.99	X	
S37	S37	New Mill Baghouse	POINT	341788.09	4400483.33	256.00	5.9219E-02	4.7000E-01	44.20	145.00	299.82	80.01	4.89	962.00	0.91	3.00	X	
Emission Unit I.D.	Model I.D.	Description	Release Type	Easting	Northing	Elevation	Comment #1		Comment #2									
							(Meters)	(Meters)	(Meters)									
S104	S104	Bran Storage	POINT	341881.00	4400371.00	257.00	Emissions Increase from 1.86E-03 Grams/Second in Project #2012-03-011											
SANDJ	SANDJ	Source "J" units (J01, J02, J03, J04, J05, J06, J08, J09, J10)	POINT	341873.00	4400446.00	257.70	Emissions Increase from 5.75E-02 Grams/Second in Project #2012-03-011											
S30	S30	Corn Hammermilling	POINT	341833.00	4400440.00	256.03	Removed and/or Never Constructed Per Project #2012-03-011		Reactivated for this project									
S31	S31	Hammermill Receiving (Slurry)	POINT	341836.00	4400440.00	256.03	Removed and/or Never Constructed Per Project #2012-03-011		Reactivated for this project									
S32	S32	Bran Hammermilling	POINT	341905.00	4400435.00	256.03	Removed and/or Never Constructed Per Project #2012-03-011		Reactivated for this project									
S33	S33	DDGS Receiver	POINT	341884.00	4400383.00	256.95	Removed and/or Never Constructed Per Project #2012-03-011		Reactivated for this project									
S11	S11	Gas Dryer/RTO	POINT	341847.00	4400370.00	256.03	Removed and/or Never Constructed Per Project #2012-03-011		Reactivated for this project									
S37	S37	New Mill Baghouse	POINT	341788.09	4400483.33	256.00	Proposed Construction-New Milling Equipment Baghouse											

Attachment E: Table 2

Table 2 LifeLine Foods, LLC-Area Source Emission Rates and Release Parameters <i>Eri Solutions, Inc. Emission Rate Submittal PM₁₀ Only Pollutant Modeled Consultant Provided Significant Impact Analysis for Proposed Project/Modification Increase in Haul Road Rates for DDGS, Food, Wet DGS, and CO₂</i>																		
Haul Road Releases																		
Emission Unit I.D.	Model I.D.	Description	Release Type	Easting	Northing	Elevation	Emission Rate			Release Height	X-Dimension	Y-Dimension	Angle	Initial Lateral Dimension	Area	Altered from Project 2012-03-01?		Comment #1
							(Meters)	(Meters)	(Meters)							(Grams/Second/M ²)	(Grams/Second)	
<i>Emission Rates for Use in the Significant Impact Analysis-Project Only-24-Hour</i>																		
ACD0	ACD0	*Food* Route (Syrup, Caustic, Acid)	AREA	342218.55	4400310.90	257.86	4.222E-08		4.161E-04	3.303E-03	2.55	6.1	18	-186	2.37	109.8	X	Emissions Increase from 4.57E-08 Grams/Second/Meter2 in Project #2012-03-011
ACD1	ACD1	*Food* Route (Syrup, Caustic, Acid)	AREA	342220.54	4400293.70	257.86	4.222E-08				2.55	6.1	24	-160	2.37	146.4		
ACD2	ACD2	*Food* Route (Syrup, Caustic, Acid)	AREA	342206.60	4400273.23	257.86	4.222E-08				2.55	6.1	58	-45.5	2.37	353.8		
ACD3	ACD3	*Food* Route (Syrup, Caustic, Acid)	AREA	342166.30	4400312.88	257.86	4.222E-08				2.55	6.1	49	-55	2.37	298.9		
ACD4	ACD4	*Food* Route (Syrup, Caustic, Acid)	AREA	342125.95	4400340.66	257.86	4.222E-08				2.55	6.1	39	-52.5	2.37	237.9		
ACD5	ACD5	*Food* Route (Syrup, Caustic, Acid)	AREA	342095.52	4400363.82	257.86	4.222E-08				2.55	6.1	30	-45.5	2.37	183		
ACD6	ACD6	*Food* Route (Syrup, Caustic, Acid)	AREA	342069.79	4400389.10	257.86	4.222E-08				2.55	6.1	18	45	2.37	109.8		
ACD7	ACD7	*Food* Route (Syrup, Caustic, Acid)	AREA	342082.07	4400401.74	257.86	4.222E-08				2.55	6.1	20	125	2.37	122		
ACD8	ACD8	*Food* Route (Syrup, Caustic, Acid)	AREA	342098.05	4400390.75	257.86	4.222E-08				2.55	6.1	53	127	2.37	323.3		
ACD9	ACD9	*Food* Route (Syrup, Caustic, Acid)	AREA	342140.38	4400358.86	257.86	4.222E-08				2.55	6.1	50	134	2.37	305		
ACD10	ACD10	*Food* Route (Syrup, Caustic, Acid)	AREA	342176.34	4400324.13	257.86	4.222E-08				2.55	6.1	62.5	142	2.37	381.25		
ACD11	ACD11	*Food* Route (Syrup, Caustic, Acid)	AREA	342211.62	4400271.43	257.86	4.222E-08				2.55	10	26.5	-133	2.37	265		
ACD12	ACD12	*Food* Route (Syrup, Caustic, Acid)	AREA	342192.24	4400253.36	257.86	4.222E-08				2.55	10	52	-83.5	2.37	520		
ACD13	ACD13	*Food* Route (Syrup, Caustic, Acid)	AREA	342140.57	4400259.24	257.86	4.222E-08				2.55	10	52	-80	2.37	520		
ACD14	ACD14	*Food* Route (Syrup, Caustic, Acid)	AREA	342089.36	4400268.27	257.86	4.222E-08				2.55	10	49	-81	2.37	490		
ACD15	ACD15	*Food* Route (Syrup, Caustic, Acid)	AREA	342040.97	4400275.94	257.86	4.222E-08				2.55	10	49	-79	2.37	490		
ACD16	ACD16	*Food* Route (Syrup, Caustic, Acid)	AREA	341992.87	4400285.29	257.86	4.222E-08				2.55	10	47	-82	2.37	470		
ACD17	ACD17	*Food* Route (Syrup, Caustic, Acid)	AREA	341946.32	4400291.83	257.86	4.222E-08				2.55	10	60	-85.5	2.37	600		
ACD18	ACD18	*Food* Route (Syrup, Caustic, Acid)	AREA	341886.51	4400296.54	257.86	4.222E-08				2.55	10	35	-84	2.37	350		
ACD19	ACD19	*Food* Route (Syrup, Caustic, Acid)	AREA	341851.70	4400300.20	257.86	4.222E-08				2.55	10	41.5	-63	2.37	415		
ACD20	ACD20	*Food* Route (Syrup, Caustic, Acid)	AREA	341814.72	4400319.04	257.86	4.222E-08				2.55	10	15	-50	2.37	150		
ACD21	ACD21	*Food* Route (Syrup, Caustic, Acid)	AREA	341803.23	4400328.68	257.86	4.222E-08				2.55	10	10	-54	2.37	100		
ACD22	ACD22	*Food* Route (Syrup, Caustic, Acid)	AREA	341795.14	4400334.56	257.86	4.222E-08				2.55	10	7	-54	2.37	70		
ACD23	ACD23	*Food* Route (Syrup, Caustic, Acid)	AREA	341789.48	4400338.67	257.86	4.222E-08				2.55	10	51	0	2.37	510		
ACD24	ACD24	*Food* Route (Syrup, Caustic, Acid)	AREA	341789.48	4400389.67	257.86	4.222E-08				2.55	10	64	90	2.37	640		
ACD25	ACD25	*Food* Route (Syrup, Caustic, Acid)	AREA	342061.28	4400377.81	257.86	4.222E-08				2.55	6.1	33	121	2.37	201.3		
ACD26	ACD26	*Food* Route (Syrup, Caustic, Acid)	AREA	342089.80	4400360.88	257.86	4.222E-08				2.55	6.1	42	127	2.37	256.2		
ACD27	ACD27	*Food* Route (Syrup, Caustic, Acid)	AREA	342123.34	4400335.61	257.86	4.222E-08				2.55	6.1	50	124	2.37	305		
ACD28	ACD28	*Food* Route (Syrup, Caustic, Acid)	AREA	342078.12	4400389.17	257.86	4.222E-08				2.55	6.1	25	-142	2.37	152.5		
ACD29	ACD29	*Food* Route (Syrup, Caustic, Acid)	AREA	342164.80	4400307.65	257.86	4.222E-08				2.55	6.1	53.5	123	2.37	326.35		
ACD30	ACD30	*Food* Route (Syrup, Caustic, Acid)	AREA	342213.99	4400276.01	257.86	4.222E-08				2.55	6.1	8.5	115	2.37	51.85		
ACD31	ACD31	*Food* Route (Syrup, Caustic, Acid)	AREA	342220.23	4400272.83	257.86	4.222E-08				2.55	6.1	66	103	2.37	402.6		
CO20	CO20	CO2 Route	AREA	341663.35	4400530.21	257.86	4.719E-08	3.612E-05	2.867E-04		2.55	37	6.1	0	2.37	225.7	X	Emissions Increase from 9.44E-08 Grams/Second/Meter2 in Project #2012-03-011
CO21	CO21	CO2 Route	AREA	341694.26	4400447.66	257.86	4.719E-08				2.55	6.1	86.5	0	2.37	539.85		
DWG0	DWG0	Wet Distillers Grains Route	AREA	341694.00	4400434.43	257.86	5.383E-07	2.529E-04	2.007E-03		2.55	6.1	23.5	116	2.37	143.35	X	Emissions Increase from 6.92E-07 Grams/Second/Meter2 in Project #2012-03-011
DWG1	DWG1	Wet Distillers Grains Route	AREA	341711.50	4400418.56	257.86	5.383E-07				2.55	30	6.1	0	2.37	183		
DWG2	DWG2	Wet Distillers Grains Route	AREA	341735.50	4400423.99	257.86	5.383E-07				2.55	6.1	23.5	62	2.37	143.35		
DGS1	DGS1	Dry Distillers Grains Route	AREA	342220.54	4400293.70	257.86	2.148E-07	1.981E-03	1.572E-02		2.55	6.1	24	-160	2.37	146.4	X	Emissions Increase from 6.14E-08 Grams/Second/Meter2 in Project #2012-03-011
DGS2	DGS2	Dry Distillers Grains Route	AREA	342206.60	4400273.23	257.86	2.148E-07				2.55	6.1	58	-45.5	2.37	353.8		
DGS3	DGS3	Dry Distillers Grains Route	AREA	342166.30	4400312.88	257.86	2.148E-07				2.55	6.1	49	-55	2.37	298.9		
DGS4	DGS4	Dry Distillers Grains Route	AREA	342125.95	4400340.66	257.86	2.148E-07				2.55	6.1	39	-52.5	2.37	237.9		
DGS5	DGS5	Dry Distillers Grains Route	AREA	342095.52	4400363.82	257.86	2.148E-07				2.55	6.1	30	-45.5	2.37	183		
DGS6	DGS6	Dry Distillers Grains Route	AREA	342069.79	4400389.10	257.86	2.148E-07				2.55	6.1	18	45	2.37	109.8		
DGS7	DGS7	Dry Distillers Grains Route	AREA	342082.07	4400401.74	257.86	2.148E-07				2.55	6.1	20	125	2.37	122		
DGS8	DGS8	Dry Distillers Grains Route	AREA	342098.05	4400390.75	257.86	2.148E-07				2.55	6.1	53	127	2.37	323.3		
DGS9	DGS9	Dry Distillers Grains Route	AREA	342140.38	4400358.86	257.86	2.148E-07				2.55	6.1	50	134	2.37	305		
DGS10	DGS10	Dry Distillers Grains Route	AREA	342176.34	4400324.13	257.86	2.148E-07				2.55	6.1	62.5	142	2.37	381.25		
DGS11	DGS11	Dry Distillers Grains Route	AREA	342211.62	4400271.43	257.86	2.148E-07				2.55	10	26.5	-133	2.37	265		
DGS12	DGS12	Dry Distillers Grains Route	AREA	342192.24	4400253.36	257.86	2.148E-07				2.55	10	52	-83.5	2.37	520		
DGS13	DGS13	Dry Distillers Grains Route	AREA	342140.57	4400259.24	257.86	2.148E-07				2.55	10	52	-80	2.37	520		
DGS14	DGS14	Dry Distillers Grains Route	AREA	342089.36	4400268.27	257.86	2.148E-07				2.55	10	49	-81	2.37	490		
DGS15	DGS15	Dry Distillers Grains Route	AREA	342040.97	4400275.94	257.86	2.148E-07				2.55	10	49	-79	2.37	490		
DGS16	DGS16	Dry Distillers Grains Route	AREA	341992.87	4400285.29	257.86	2.148E-07				2.55	10	47	-82	2.37	470		
DGS17	DGS17	Dry Distillers Grains Route	AREA	341946.32	4400291.83	257.86	2.148E-07				2.55	10	60	-85.5	2.37	600		
DGS18	DGS18	Dry Distillers Grains Route	AREA	341886.51	4400296.54	257.86	2.148E-07				2.55	10	35	-84	2.37	350		
DGS19	DGS19	Dry Distillers Grains Route	AREA	341851.70	4400300.20	257.86	2.148E-07				2.55	10	41.5	-63	2.37	415		
DGS20	DGS20	Dry Distillers Grains Route	AREA	341814.72	4400319.04	257.86	2.148E-07				2.55	10	15	-50	2.37	150		
DGS21	DGS21	Dry Distillers Grains Route	AREA	341803.23	4400328.68	257.86	2.148E-07				2.55	10	10	-54	2.37	100		
DGS22	DGS22	Dry Distillers Grains Route	AREA	341795.14	4400334.56	257.86	2.148E-07				2.55	6.1	33	121	2.37	201.3		
DGS23	DGS23	Dry Distillers Grains Route	AREA	342089.80	4400360.88	257.86	2.148E-07				2.55	6.1	42	127	2.37	256.2		
DGS24	DGS24	Dry Distillers Grains Route	AREA	342123.34	4400335.61	257.86	2.148E-07				2.55	6.1	50	124	2.37	305		
DGS25	DGS25	Dry Distillers Grains Route	AREA	342078.12	4400389.17	257.86	2.148E-07				2.55	6.1	25	-142	2.37			

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SIC	Standard Industrial Classification
GHG	Greenhouse Gas	SIP	State Implementation Plan
gpm	gallons per minute	SMAL	Screening Model Action Levels
gr	grains	SO_x	sulfur oxides
GWP	Global Warming Potential	SO₂	sulfur dioxide
HAP	Hazardous Air Pollutant	tph	tons per hour
hr	hour	tpy	tons per year
hp	horsepower	VMT	vehicle miles traveled
lb	pound	VOC	Volatile Organic Compound
lbs/hr	pounds per hour		
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

Mr. Mike Sobetski
Vice President and Chief Operating Officer
Lifeline Foods, Inc.
2811 South 11th Street
St. Joseph, MO 64503

RE: New Source Review Permit - Project Number: 2013-09-013

Dear Mr. Sobetski:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Randy E. Raymond, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:rerl

Enclosures

c: Kansas City Regional Office
PAMS File: 2013-09-013

Permit Number: