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DEPARTMENT OF ENVIRONMENTAL QUALITY

PTC (15-Day Pre-Permit Construction) Application

Agro Farma Twin Falls–Chobani Facility Twin Falls, Idaho

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DEQ
By R. Greenwood

Prepared for
Agro Farma

January 2012

CH2MHILL

Contents

1.0 Introduction

On behalf of the Agro Farma, Inc. (Agro Farma), CH2M HILL has prepared a 15-Day Permit-to-Construct (PTC) application for a new dairy processing facility that will produce yogurt in Twin Falls, Idaho. The facility name of the new dairy processing facility is Agro Farma Twin Falls – Chobani Facility (Agro Farma Facility). To expedite construction for this new facility, the requirements for Pre-Permit Construction approval will be followed in accordance with the *Rules for the Control of Air Pollution in Idaho* (IDAPA) 58.01.01.213.02.

An application fee of $1,000.00 has been included with the application submittal in accordance with IDAPA 58.01.01.226. A signed general information application form GI has also been included with this application package. Completed Idaho Department of Environmental Quality (IDEQ) application forms are included in Appendix A.

An informational meeting has been scheduled at the City Council Chambers located at 305 Third Ave. East in Twin Falls, Idaho from 6 to 8 PM on Wednesday January 18, 2012 A public announcement was published in the Twin Falls –Time News on January 7, 2012. A copy of the public announcement is included in Appendix B.

This pre-permit construction and PTC application includes a process description, plot plan, process flow diagram, emission estimates, modeling protocol and results, and regulatory review. This application is intended to satisfy the requirements for Pre-Permit Construction in accordance with IDAPA 58.01.01.213.

2.0 Process Description

The proposed Agro Farma facility will be located at 3450 Kimberly Road East in Twin Falls, Idaho. The area surrounding the site is primarily a rural area currently used for equipment sales, rental, and maintenance facilities and agriculture. In addition to the equipment and agriculture facilities, Agro Farma plans to lease a parcel of land to the southwest of the proposed Agro Farma facility to the City of Twin Falls for the construction and operation of a wastewater pre-treatment facility. The general project location is shown in Figure 1.

CH2M HILL prepared a "Justification Memorandum" to demonstrate that the Agro Farma Twin Falls- Chobani Facility and City of Twin Falls Wastewater Pre-Treatment Facilities are separate facilities. IDEQ has concurred with the "Justification Memorandum" submitted to IDEQ on January 5, 2012 and that each facility will be required to obtain an air quality permit for its own equipment. A copy of the CH2M HILL "Justification Memorandum" and IDEQ concurrence letter are provided in Appendix C.

The proposed Agro Farma Facility will produce yogurt. Figure 2 provides a process flow diagram of the yogurt making process. To produce the yogurt, the new dairy processing facility will operate five natural gas boilers, one anhydrous ammonia refrigeration system containing 8 chillers, and 8 one cell cooling towers. In addition, three natural gas make-up air unit (MAU) heaters, eight natural gas roof top unit (RTU) heaters, and eight natural gas infrared heaters (IRH) will be used to provide building heat to the offices and facility buildings. Table 1 summarizes the manufacture, model, rated capacity, and fuel type for each proposed emission unit.

3.0 Scaled Plot Plan

The project boundaries and scaled facility layout are shown in Figure 3. All emission generating sources are also shown in Figure 3.

4.0 Potential to Emit Emission Estimates

Emission calculations have been revised from the initial modeling protocol to reflect operational changes proposed by the Agro Farma facility. These operational changes include constructing and operating only five boilers instead of nine and three MAUs instead of the four MAUs. The need for the construction and operation of the additional four boilers and one MAU will be determined by future demand.

TABLE 1
Emission Unit List

Emission Unit	Stack ID[1]	Manufacturer[2]	Model[2]	Rated Capacity[2]	Fuel Type
Natural Gas Boiler 1	Boiler1	Cleaver Brooks	CBLE-700-800	3.2659 MMBTU/Hour	Natural Gas
Natural Gas Boiler 2	Boiler2	Cleaver Brooks	CBLE-700-800	3.2659 MMBTU/Hour	Natural Gas
Natural Gas Boiler 3	Boiler3	Cleaver Brooks	CBLE-700-800	3.2659 MMBTU/Hour	Natural Gas
Natural Gas Boiler 4	Boiler4	Cleaver Brooks	CBLE-700-800	3.2659 MMBTU/Hour	Natural Gas
Natural Gas Boiler 5	Boiler5	Cleaver Brooks	CBLE-700-800	3.2659 MMBTU/Hour	Natural Gas
Boiler Room MAU (50,000 cfm, direct fired)	BRMAU1	Rupp Air	RAM 225	3,586,957 BTU/Hour	Natural Gas
Main Office RTU 1 (indirect fired)	RTU1	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Main Office RTU 2 (indirect fired)	RTU2	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Main Office RTU 3 (indirect fired)	RTU3	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Main Office RTU 4 (indirect fired)	RTU4	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Main Office RTU 5 (indirect fired)	RTU5	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Main Office RTU 6 (indirect fired)	RTU6	Carrier	48A5,T,030	525,000 BTU/Hour	Natural Gas
Lab MAU (6,000 cfm, indirect fired)	LABMAU	Aaon	RN-050	810,000 BTU/Hour	Natural Gas
Meeting/RR/Plant Offices/Maintenance Office RTU (indirect fired)	PLANT	Carrier	48A5,S,020	350,000 BTU/Hour	Natural Gas
Maintenance/Parts/Fab RTU (indirect fired)	MAINT	Carrier	48A5,S,060	1,164,000 BTU/Hour	Natural Gas
Battery MAU (42,000 cfm, direct fired)	BATTMAU	Rupp Air	RAM 222	3,586,957 BTU/Hour	Natural Gas
Receiving Bay IRH 1	IRH1	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 2	IRH2	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 3	IRH3	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 4	IRH4	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 5	IRH5	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 6	IRH6	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
Receiving Bay IRH 7	IRH7	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas

TABLE 1
Emission Unit List

Emission Unit	Stack ID[1]	Manufacturer[2]	Model[2]	Rated Capacity[2]	Fuel Type
Receiving Bay IRH 8	IRH8	Reznor	VR-200-60	200,000 BTU/Hour	Natural Gas
8 One Cell Cooling Towers	CT01 through CT-08			34,140 gpm Flow Rate (2,845 gpm per tower) 1500 mg/L or ppmw TDS 0.00005 gal drift/gal flow	Not applicable
Anhydrous Ammonia Refrigeration System (8 Chillers)	REFRIG			14,850 lb (1,350 lb each Chiller)	Not applicable

Notes:
[1]Stack IDs per December 27, 2011 submitted Modeling Protocol

[2]Manufacturer, Model Number, and Rated Capacity as provided by Shambaugh & Son on December 19, 2011.

Abbreviations:

MMBTU/Hour	million British thermal units per hour
BTU/Hour	British thermal units per hour
Cfm	cubic feet per minute
gpm	gallons per minute
mg/L	milligrams per liter
ppmw	parts per million
gal	gallon
lb	pound
TDS	total dissolved solids

The annual emission rates for the five Cleaver Brooks boilers, three MAU heaters, eight RTU heaters, and eight IRHs are based on 8,760 hours of operation combusting natural gas and the rated capacities summarized in Table 2-1. Criteria pollutant, hazardous air pollutant (HAP), and toxic air pollutant (TAP) emission estimates for the Cleaver Brook natural gas boilers are calculated based on emission factors provided by available manufacturer data and from the U.S. Environmental Protection Agency (EPA) *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1(AP-42): Chapter 1 External Combustion Sources, Section 1.4 Natural Gas.* Emission estimates for criteria pollutants, HAPs, and TAPs for the heaters are also calculated using emission factors stated in *AP-42 Chapter 1 External Combustion Sources, Section 1.4 Natural* Gas. The Tier 1 Methodology and equation C-8 outlined in 40 Code of Federal Regulations (CFR) Part 98 Supbart C is used to calculate the greenhouse gas (GHG)pollutants of carbon dioxide (CO_2) nitrogen oxide (N_2O), and methane (CH_4). In addition, Carbon dioxide equivalents (CO2e) were calculated as described in 40 CFR Part 98.

The 8 one cell cooling tower particulate emissions are based on a total water flow rate of 34,140 gpm (2,845 gpm per each tower), a TDS blowdown concentration of 1,500 mg/L or ppmw, and a control efficiency of the drift eliminators of 0.00005 gal drift/gal flow, as provided by Shambaugh & Son on December 19, 2011. Particulate emission estimates for the cooling towers are calculated using the methodology summarized in *AP-42 Chapter 13 Miscellaneous Sources, Section 13.4 Wet Cooling Towers.* The cooling tower particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns (PM_{10}) emissions are calculated using on a 0.300 fraction of flow producing PM_{10} drift, as stated in the J. Reisman and G. Frisbee paper *Calculating Realistic PM_{10} Emissions From Cooling Towers,* presented at the Air and Waste Management Association (AWMA) annual meeting in 2001. It was assumed that particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns ($PM_{2.5}$) emissions are equal to PM_{10} emissions.

Under normal operations, the anhydrous ammonia refrigeration system will not release emissions to the ambient air. In the event of a system backup, an instantaneous release of ammonia would occur from a pressure release valve. The estimated ammonia release is based on 10,800 lb (1,350 lb per chiller) of anhydrous ammonia, the maximum capacity of the refrigeration system as provided by Shambaugh & Son on December 19, 2011.

For all of the natural gas combusting units, TAP emissions were estimated and compared to the screening emission limits (EL) specified in IDAPA 58.01.01 585 and 586. Modeling was performed for those TAPs whose emission estimate is greater than the EL. Ammonia emissions from the anhydrous ammonia refrigeration system were not included for modeling, as under normal operations, the system will not release ammonia to the ambient air.

Agro Farma is not proposing any emission controls for any of the emitting sources at the dairy processing facility. Emission calculations are included in Appendix D. Manufacturer data for the natural gas boilers are provided in Appendix E. The baseline emission summary table (Table 2) is provided below.

5.0 Facility Classification

The Agro Farma facility is not a major facility as defined in IDAPA 58.01.01.008.10 or a designated facility as defined in IDAPA 58.01.01.006.26. The primary Standard Industrial Classification (SIC) code for the facility is 2026; *Fluid Milk (Except Ultra High Temperature).* The facility emits less than 100 tons per year of any regulated pollutant and less than 100,000 tons per year of CO2e. The site is a minor source for Hazardous Air Pollutants (HAPs) with total potential aggregate HAP emissions of less than 25 tons per year and emissions of any single HAP of less than 10 tons per year. The Agro Farma facility is not a listed facility in 40 CFR Part 52 (100 tons per year threshold) and is not otherwise subject to Part 52 New Source Review (PSD) requirements due to potential emissions less than all applicable PSD major source thresholds.

The Agro Farma facility will be located in the city of Twin Falls, Twin Falls County, Idaho. Twin Falls County is located in an attainment area for carbon monoxide (CO), PM_{10}, $PM_{2.5}$, sulfur dioxide (SO_2), oxides of nitrogen (NO_x), ozone (O_3), and lead (Pb). There are no Class I areas within 10 kilometers of the facility.

TABLE 2
Facility Baseline Emissions Summary

Emissions Unit Name	Stack ID	PM		PM_{10}[1]		$PM_{2.5}$[1]		NOx		SO_2		CO		VOC		Lead		HAPs		CO2e
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	ton/yr
Cleaver Brooks CBLE-700-800 Boiler 1	BOILER1	0.33	1.45	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05	6.00E-02	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 Boiler 2	BOILER2	0.33	1.45	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05	6.00E-02	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 Boiler 3	BOILER3	0.33	1.45	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05	6.00E-02	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 Boiler 4	BOILER4	0.33	1.45	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05	6.00E-02	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 Boiler 5	BOILER5	0.33	1.45	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05	6.00E-02	2.60E-01	16,868.25
Boiler Room MAU 1 Rupp Air RAM 225 (direct fired)	BRMAU 1	0.03	0.13	0.03	0.13	0.03	0.13	0.35	1.53	2.11E-03	0.01	0.30	1.31	0.02	0.09	1.76E-06	7.71E-06	1.00E-02	3.00E-02	1,852.79
Lab MAU Aaon RN-050 (indirect fired)	LABMAU	0.01	0.04	0.01	0.04	0.01	0.04	0.08	0.35	4.76E-04	2.08E-03	0.07	0.31	4.37E-03	0.02	3.97E-07	1.74E-06	1.51E-03	1.00E-02	418.36
Battery MAU Rupp Air RAM 222 (direct fired)	LABMAU	0.03	0.13	0.03	0.13	0.03	0.13	0.35	1.53	2.11E-03	0.01	0.30	1.31	0.02	0.09	1.76E-06	7.71E-06	1.00E-02	3.00E-02	1,852.79
Main Office RTU 1 Carrier 48A5,T,030 (indirect fired)	RTU1	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Main Office RTU 2 Carrier 48A5,T,030 (indirect fired)	RTU2	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Main Office RTU 3 Carrier 48A5,T,030 (indirect fired)	RTU3	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Main Office RTU 4 Carrier 48A5,T,030 (indirect fired)	RTU4	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Main Office RTU 5 Carrier 48A5,T,030 (indirect fired)	RTU5	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Main Office RTU 6 Carrier 48A5,T,030 (indirect fired)	RTU6	3.91E-03	0.04	3.91E-03	0.04	3.91E-03	0.04	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	1.72E-07	1.13E-06	9.72E-04	4.27E-03	271.31
Meeting/RR/Plant Offices/Maintenance Office RTU Carrier 48A5,S,020 (indirect fired)	PLANT	2.61E-03	0.01	2.61E-03	0.01	2.61E-03	0.01	0.03	0.13	2.06E-04	9.02E-04	0.03	0.13	1.89E-03	0.01	1.72E-07	7.53E-07	6.47E-04	2.83E-03	180.70

TABLE 2
Facility Baseline Emissions Summary

Emissions Unit Name	Stack ID	PM		PM_{10}[1]		$PM_{2.5}$[1]		NOx		SO_2		CO		VOC		Lead		HAPs		CO2e
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	ton/yr
Maintenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired)	MAINT	0.01	0.04	0.01	0.04	0.01	0.04	0.11	0.48	6.85E-04	3.00E-03	0.10	0.44	0.01	0.04	5.71E-07	2.50E-06	2.15E-03	1.00E-02	601.10
Reznor VR-2-60 Receiving Bay IRH 1	IRH1	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 2	IRH2	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 3	IRH3	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 4	IRH4	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 5	IRH5	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 6	IRH6	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 7	IRH7	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.25
Reznor VR-2-60 Receiving Bay IRH 8	IRH8	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07	3.70E-04	1.63E-03	103.21
8 One Cell Cooling Towers	CT01-CT08	0.84	3.68	0.25	1.10	0.25	1.10	--	--	--	--	--	--	--	--	--	--	--	--	--
Anhydrous Ammonia Refrigeration System (8 Chillers)	REFRIG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total		**2.61**	**11.50**	**2.02**	**8.92**	**2.02**	**8.92**	**12.98**	**56.86**	**0.11**	**0.49**	**7.10**	**31.15**	**0.73**	**3.20**	**8.69E-05**	**3.81E-04**	**0.33**	**1.42**	**91,701**

Lb/hour: pound per hour
Ton/yr: ton per year
PM: Particulate Matter
PM_{10}: Particulate Matter with an Aerodynamic Diameter of Less Than or Equal to a Nominal 10 microns
NOx: Nitrogen Oxides
PM2.5: Particulate Matter with an Aerodynamic Diameter of Less Than or Equal to a Nominal 2.5 microns
SO_2: Sulfur Dioxide
CO: Carbon Monoxide
VOC: Volatile Organic Compounds
HAPs: Hazardous Air Pollutants
CO2e: Carbon Dioxide Equivalents

6.0 Ambient Impact Analysis

An air dispersion modeling protocol was prepared by CH2M HILL and submitted to IDEQ on December 27, 2011. The source parameters and modeling assumptions were identified within the modeling protocol. The protocol was approved via e-mail by IDEQ on January 12, 2012. The air dispersion modeling protocol and IDEQ approval are included in Appendix F.

Dispersion modeling was performed using 25 individual sources which included the natural gas boilers, building heaters, and cooling towers. Emissions from the anhydrous ammonia refrigeration system were not included for modeling, as under normal operations, the system will not release emissions to the ambient air.

Five boiler stacks, eleven roof top units (RTUs and MAUs) and 8 one-cell cooling towers were represented as point sources. Average flow rates and temperatures provided by Cleaver Brooks (manufacturer) were used for the natural gas boilers. RTUs were modeled with vertical stack releases and MAUs were modeled with horizontal stack releases. Manufacturer data for RTU and MAU exhaust temperature and exhaust flow were not available upon contacting manufacturers. Therefore, CH2M HILL used best engineering judgment to estimate these parameters based on similar type units.

In addition, Shambaugh & Son provided the cooling tower information as well as the stack height and stack diameter for all the equipment.

Point source parameters are provided in Table 3.

TABLE 3
Point Source Stack Parameters

Source Type	Number of Sources	Release Type	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)
Natural Gas Boiler Stack	5	Vertical	15.85	472	18.86[a]	0.61
Boiler Room MAU[b]	1	Horizontal	14.63	313	15.24	1.27
Lab MAU[b]	1	Horizontal	14.63	313	15.24	0.50
Battery MAU[b]	1	Horizontal	14.63	313	15.24	1.27
Plant Offices RTU[b]	1	Vertical	14.63	313	15.24	0.50
Maintenance RTU[b]	1	Vertical	14.63	313	15.24	0.50
Roof Top Units[b]	6	Vertical	14.63	313	15.24	0.50
Cooling Tower Cells	8	Vertical	23.47	300	11.43[c]	3.96

[a] Velocity based on flow rate of 6,406 scfm (based on Cleaver Brooks Emissions Data – Appendix B)[c]
[b] Exhaust parameters estimated based on good engineering judgment based on similar type units
[c] Velocity based on flow rate of 314,078 acfm (based on Agro Farma Emissions Data prepared by Shambaugh and Son – Appendix C)

Building IRHs were represented as a volume source. The volume source parameters are presented in Table 4.

TABLE 4
Volume Source Release Parameters

Source Type	Number of Sources	Release Height [1] (meters)	Initial Horizontal Dimension [2] (meters)	Initial Vertical Dimension [3] (meters)
Receiving bay infrared heater	8	13.72	0.024	6.38

Notes
[1] Release height based on building height of 13.72 meters
[2] Initial horizontal dimension based on 4-inch opening divided by 4.3
[3] Initial vertical dimension based on building height of 13.72 meters divided by 2.15

Ambient air was defined as mixed signs and fencing surrounding the entire facility property boundary (see Figure 3). As such, the immediate area around the Chobani Café (store front) was determined to be ambient air because it will be open to the public. The Café is located on the northern perimeter of the facility. Agro Farma will place a no public access sign where the access road forms a T. The parking lot area will be used for employees of the Agro Farma facility only and a separate parking area for public use will be located on the eastern, front side of the Café. In addition, there is a canal that runs through the northeastern portion of the facility property. Based on an agreement with Agro Farma, Twin Falls Canal Company is responsible for maintenance of the canal. As such, this canal is also considered ambient air.

VOC emissions were not modeled because VOC is regulated as a precursor to ozone and there is no ambient standard for VOC. In addition modeling for CO (1-hour and 8-hour), and SO_x (1-hour and 3-hour) were not performed as the total facility emission rate was determined to be below IDEQ Modeling thresholds for this pollutant. Modeling was performed for those TAPs whose emission estimate is greater than the EL. A table showing TAPs with emissions above the EL are included in Appendix D. However, ammonia was not modeled as it is only emitted from the anhydrous ammonia refrigeration system, which under normal operations will not release emissions to the ambient air.

Background concentrations for criteria pollutants were provided by IDEQ in the protocol approval letter dated January 12, 2012 (see Table 5).

TABLE 5
Ambient Background Concentrations

Pollutant	Averaging Period	Concentration (ug/m^3)
PM10	24-hour	52 [1]
PM2.5 [2]	24-hour	21.3 [3]
	Annual	7.2 [4]
NO_2	1-hour	81.5 [5]
	Annual	24.5 [6]

Notes
[1] Twin Falls monitoring data spanning 1998 through 2002
[2] Twin Falls monitoring data spanning 2000 through 2002
[3] Based on the three year average of the 98th percentile average
[4] Based on the three year average of the annual mean value
[5] Twin Falls monitoring data spanning 2009 through 2011, 98th percentile values of NO_2
[6] Twin Falls monitoring data average of town/suburban background concentration (32 ug/m^3) and agricultural background concentration (17 ug/m^3). Also, IDEQ requests (modeling approval letter) that the Amalgamated Sugar Company (TASCO) facility be included in the cumulative NO_2 impact analysis where maximum impacts exceed the 1-hour and /or annual NO_2 SILs. See IDEQ Modeling Approval Letter in Appendix E for further information.

Modeling assumptions and results are detailed in a modeling report included in Appendix G. A CD containing modeling files and emission estimates are attached with this application.

7.0 Applicable Requirements

A regulatory analysis was performed for the proposed Agro Farma facility to determine the applicability of state and federal air quality regulations. The regulatory applicability determinations are included in this section.

The following sections address air quality regulatory compliance requirements for the dairy processing facility. As detailed below, the source will comply with all applicable Idaho air quality regulations codified in IDAPA 58.01.01, as well as applicable EPA Code of Federal Regulations (CFR).

Federal Regulations

New Source Review and Prevention of Significant Deterioration Applicability—40 CFR Parts 51 and 52

In accordance with EPA and IDAPA 58.01.01. 205 rules, the proposed facility will not be required to submit a construction permit application subject to the requirements of New Source Review (NSR) as it is not a major new source. The requirements of NSR vary, depending on whether the proposed facility will be located in a non-attainment or attainment area for NAAQS.

New Source Review for Non-Attainment Areas

Non-Attainment Area NSR is the portion of NSR that applies to areas that are not in attainment of NAAQS. Twin Falls County is classified as attainment or unclassifiable for all NAAQS. Therefore, Non-Attainment Area NSR is not required for the proposed facility.

New Source Review for Attainment or Unclassifiable Areas

Prevention of Significant Deterioration (PSD) is the portion of NSR that applies to pollutants that are in attainment of NAAQS, or are unclassifiable. Twin Falls County is classified as attainment or unclassifiable for the criteria pollutants NO_X, CO, SO_2, ozone, lead, PM_{10}, and $PM_{2.5}$. Therefore, new or modified air emission sources are potentially subject to PSD review for these pollutants, depending on the proposed facility's major source status and on the emission rates of NO_X, CO, SO_2, VOC, PM_{10}, and $PM_{2.5}$.

A PSD review is required if the proposed facility is a major PSD source. A source is considered to be major if:

- It is included in a list of 28 specific source categories and its potential to emit (PTE) any of the NSR-regulated pollutants exceeds 100 tons per year, or
- Its PTE exceeds 250 tons per year for any other source category.

The list of 28 specific source categories with the 100 tons per year threshold does not include general dairy processing facility and the facility is not a designated facility as defined in IDAPA 58.01.01.006.26 Therefore, the proposed source is not subject to a 100 tons per year major source threshold for PSD review.

The proposed facility could only be considered to be a PSD major source if it has a PTE greater than 250 tons per year of any criteria pollutant. The proposed facility will not have a PTE greater than 250 tons per year for NO_X, CO, VOC, PM_{10}, and $PM_{2.5}$ and therefore will not be considered a major PSD source.

Greenhouse Gas Tailoring Rule

On May 13, 2010, the U.S. Environmental Protection Agency (EPA) issued a final rule that establishes an approach to addressing greenhouse gas emissions from stationary sources under the Clean Air Act (CAA) permitting programs. This final rule sets thresholds for GHG emissions that define when permits under the NSR, PSD, and Title V Operating Permit programs are required for new and existing facilities. This rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain PSD and Title V permits.

Beginning July 1, 2011, the PSD major source threshold of 100,000 tons per year CO2e became effective. A new source with potential GHG emissions above 100,000 tons per year CO2e is now subject to PSD permitting requirements for GHGs, regardless of whether PSD is also triggered for non-GHG pollutants. Modifications to existing major sources (defined relative to the new 100,000 tons per year threshold for CO2e or the 100/250 tons per year threshold for traditional NSR regulated pollutants) that result in an increase of GHG emissions by 75,000 tons per year CO2e or more are subject to PSD permitting requirements for GHGs. Therefore, beginning July 1, 2011, PSD for GHG pollutants can be triggered regardless of whether PSD is also triggered for non-GHG pollutants. In addition, beginning July 1, 2011, facilities with potential CO2e emissions of 100,000 tons per year or more are subject to Title V permitting requirements.

For determining PSD (or Title V) major source or major modification applicability, the quantity of GHGs emitted must not only equal or exceed 100,000 tons per year (75,000 tons per year for modifications) thresholds on a CO2e basis, but the sum of emissions of each GHG pollutant not adjusted for its global warming potential must

also exceed the applicable threshold for non-GHG regulated pollutants (i.e., 100 tons per year for Title V or 100 tons per year/250 tons per year for PSD, depending on whether the source is on the list of 28 PSD categories or a designated facility as defined in IDAPA 58.01.01.006.26v).

As the total facility CO2e is 91,701 tons per year, the facility is not subject to PSD or Title V operating permit programs with respect to the GHG Tailoring Rule at this time.

New Source Performance Standards - 40 CFR Part 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

The five Cleaver Brooks boilers are subject to 40 CFR Part 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as each boiler is capable of combusting approximately 32.659 MMBTU/hour. None of the heaters (MAUs, RTUs, or IRHs) are applicable to 40 CFR Part 60 Subpart Dc, as all of the heaters have a maximum heat input capacity of less than 10 MMBTU/hour.

The five boilers will only combust natural gas for fuel. As such, the sulfur dioxide and particulate matter standards do not apply as the boilers are not capable of combusting coal, wood, or oil.

In addition as the five Cleaver Brooks boilers will only use natural gas as fuel, the reporting and recordkeeping requirements for these boilers will consist of the following:

- The facility will submit notification of the date of construction or reconstruction and actual startup within 30 days. This notification will include the following for each of the five Cleaver Brooks boilers: design heat input capacity, fuels to be combusted, and the anticipated operating annual capacity factor based on each individual fuel fired (40 CFR 60.48c (a)).
- Maintain records of the amount of each fuel combusted in each boiler during each calendar month or the total amount of natural gas delivered to facility each calendar month (40 CFR 60.48c (g)(2) and (3)).
- Records will be maintained by the facility for a period of 2 years following the date of the record (40 CFR 60.48c (i)).

National Emission Standards for Hazardous Air Pollutants - 40 CFR Part 63

Section 112 of the Clean Air Act (CAA) Amendments relates to the release of air toxic contaminants. The requirements of CAA Section 112(g) or (j) are not applicable because the facility is not a major source of HAPs (40 CFR 63.40(b)). Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAPS) apply to both major sources of HAPs, defined as PTE equal to or greater than 10 tons per year for any single HAP or PTE equal to or greater than 25 tons per year for total HAP, and area sources of HAPs as defined as any stationary source of HAPs that is not a major source. As HAP emissions are below major source thresholds, the Agro Farma facility is not a major source of HAPs. However the facility is an area source of HAPs.

National Emission Standard for Hazardous Air Pollutants - 40 CFR Part 63 Subpart Q (NESHAP for Industrial Process Cooling Towers)

The eight cooling towers will not be subject to 40 CFR Part 63, Subpart Q, NESHAP for Industrial Process Cooling Towers as the facility is not a major source of HAP emissions.

National Emission Standard for Hazardous Air Pollutants - 40 CFR Part 63 Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters)

The five Cleaver Brooks boilers and the heaters will not be subject to 40 CFR Part 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters as the facility is not a major source of HAP emissions.

National Emission Standard for Hazardous Air Pollutants - 40 CFR Part 63 Subpart JJJJJ (NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources)

As the five Cleaver Brooks boilers and the heaters at the Agro Farma facility will combust natural gas exclusively, the emission units meet the definition a gas-fired boiler. As such the five boilers and the heaters are not subject to 40 CFR Part 63 Subpart JJJJJJ, nor to any requirements in the subpart.

Acid Rain Deposition Control Program—40 CFR Part 72, 73, 74, and 75

The acid rain deposition control program applies to electric utility steam-generating units. The proposed facility is not a utility steam generating unit and not subject to the acid rain deposition control program based on the definition of an affected unit.

Protection of Stratospheric Ozone—40 CFR Part 82

Refrigerants that contain ozone-depleting substances are regulated under the Stratospheric Ozone Protection Program (40 CFR 82). The applicable requirements under this program will be performed including maintenance of equipment containing substances (such as, comfort coolers).

Accidental Release Prevention Program—40 CFR Part 68

The storage and use of 14,850 pounds of anhydrous ammonia, a listed hazardous substance, in the refrigeration system is above the threshold amount stated in 40 CFR Part 68. Therefore, a Risk Management Plan (RMP) will be required. Agro Farma will submit a RMP prepared in accordance with 40 CFR Part 98 prior to operation of the anhydrous ammonia refrigeration system.

Compliance Assurance Monitoring —40 CFR Part 64

The Compliance Assurance Monitoring (CAM) rule (40 CFR 64) applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at a major source that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria:

The PSEU must:

- be subject to an emission limitation or standard
- use a control device to achieve compliance
- have potential pre-control emissions that exceed or are equivalent to the major source threshold

The Agro Farma facility is not a major source nor will any control devices be used. Therefore, the CAM rule is not applicable to the Agro Farma facility.

IDAPA Regulations

IDAPA 58.01.01.123

CERTIFICATION OF DOCUMENTS

> "All documents, including but not limited to, application forms for permits to construct, application forms for operating permits, progress reports, records, monitoring data, supporting information, requests for confidential treatment, testing reports or compliance certifications submitted to the Department shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

Agro Farma will comply with the regulation outlined in this section.

IDAPA 58.01.01.124

TRUTH, ACCURACY AND COMPLETENESS OF DOCUMENTS

> "All documents submitted to the Department shall be truthful, accurate and complete."

Agro Farma will comply with the regulation outlined in this section.

IDAPA 58.01.01.125
FALSE STATEMENTS

> "No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under any permit, or any applicable rule or order in force pursuant thereto."

Agro Farma will comply with the regulation outlined in this section.

IDAPA 58.01.01.130
STARTUP, SHUTDOWN, SCHEDULED MAINTENANCE, SAFETY MEASURES, UPSET AND BREAKDOWN.

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. Water Cooling Tower
4. Anhydrous Ammonia Refrigeration System

If an excess emission event occurs during startup, shutdown, scheduled maintenance, safety measures, upset or breakdown, the Agro Farma Facility will comply with IDAPA 58.01.01.130 through 58.01.01.136.

In the event of an upset or breakdown of a boiler or heater, the malfunctioning unit would be shut down. This includes any malfunction that could create excess emissions.

IDAPA 58.01.01.156
TOTAL COMPLIANCE

> "Where more than one (1) section of these rules applies to a particular situation, all such rules must be met for total compliance, unless otherwise provided for in these rules."

Agro Farma will comply with the regulations outlined in this section.

IDAPA 58.01.01.157
TEST METHODS AND PROCEDURES

1. Cleaver Brooks Boilers

If an emission test is required, the Agro Farma facility will adhere to procedures outlined in IDAPA 58.01.01.157.

IDAPA 58.01.01.161
TOXIC SUBSTANCES

1. Natural Gas Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System

> "Any contaminant which is by its nature toxic to human or animal life or vegetation shall not be emitted in such quantities or concentrations as to alone, or in combination with other contaminants, injure or unreasonably affect human or animal life or vegetation."

See emission calculations in Appendix D and modeling results in Appendix G.

IDAPA 58.01.01.200
PROCEDURES AND REQUIREMENTS FOR PERMITS TO CONSTRUCT

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System
4. Cooling Towers

Upon approval of the 15-Day PTC by IDEQ, Agro Farma will follow the procedures and requirements outlined under IDAPA 58.01.01.200 for obtaining a PTC.

IDAPA 58.01.01.210
DEMONSTRATION OF PRECONSTRUCTION COMPLIANCE WITH TOXIC STANDARDS

1. Natural Gas Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System

"In accordance with Subsection 203.03, the applicant shall demonstrate preconstruction compliance with Section 161 to the satisfaction of the Department. The accuracy, completeness, execution and results of the demonstration are all subject to review and approval by the Department."

See emission calculations in Appendix D and modeling results in Appendix G.

IDAPA 58.01.01.213
PRE-PERMIT CONSTRUCTION

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System
4. Cooling Towers

IDAPA 58.01.01.213.02 **Permit to Construct Procedures for Pre-Permit Construction**

IDAPA 58.01.01.213.02.a **Informational Meeting**

"Within ten (10) days after the submittal of the pre-permit construction approval application, the owner or operator shall hold an informational meeting in at least one (1) location in the region in which the stationary source or facility is to be located. The informational meeting shall be made known by notice published at least ten (10) days before the meeting in a newspaper of general circulation in the county(ies) in which the stationary source or facility is to be located. A copy of such notice shall be included in the application." See a copy of the Public Meeting Notice in Appendix B.

Agro Farma will comply with procedures and regulations outlined in this section in order to obtain the 15-Day PTC.

IDAPA 58.01.01.220
GENERAL EXEMPTION CRITERIA FOR PERMIT TO CONSTRUCT EXEMPTIONS

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System
4. Cooling Towers

IDAPA 58.01.01.220a **Major Source or Major Modification**

"The maximum capacity of a source to emit an air pollutant under its physical and operational design without consideration of limitations on emission such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed would not:

i. Equal or exceed one hundred (100) tons per year of any regulated air pollutant.
ii. Cause an increase in the emissions of a major facility that equals or exceeds the significant emissions rates set out in the definition of significant at Section 006."

IDAPA 58.01.01.220b **Combination**

The source is not part of a proposed new major facility or part of a proposed major modification.

The Agro Farma facility will not have the PTE equal to or exceeding 100 tons per year for any regulated air pollutant and will not be a major facility or part of a proposed new major facility or part of a proposed major modification.

IDAPA 58.01.01.221 **Category I Exemption**

"No permit to construct is required for a source that satisfies the criteria set forth in Section 220 and the following:"

IDAPA 58.01.01.221.01 **Below Regulatory Concern.**

"The maximum capacity of a source to emit an air pollutant under its physical and operational design considering limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed shall be less than ten percent (10%) of the significant emission rates set out in the definition of significant at Section 006."

The facility does not meet the BRC criteria of a Category I exemption outlined in IDAPA 58.01.01.221.01 (Below Regulatory Concern).

IDAPA 58.01.01.300
PROCEDURES AND REQUIREMENTS FOR TIER I OPERATING PERMITS

"The purposes of Sections 300 through 399 are to establish requirements and procedures for the issuance of Tier I operating permits."

The Agro Farma facility does not contain any Tier I sources and is therefore not subject to the applicable requirements in Section 300 through 399.

IDAPA 58.01.01.577
AMBIENT AIR QUALITY STANDARDS FOR SPECIFIC AIR POLLUTANTS
(PM-10, SOx, NOx, CO, Pb)

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)
3. 14,850 Pound Anhydrous Ammonia Refrigeration System
4. Cooling Towers

IDAPA 58.01.01.577.01 **PM-10 Standards**

IDAPA 58.01.01.577.01.a **Primary and Secondary Standards**

IDAPA 58.01.01.577.01.a.i **Annual Standard**

"Fifty (50) micrograms per cubic meter, as an annual arithmetic mean -- never expected to be exceeded in any calendar year."

IDAPA 58.01.01.577.01.a.ii **24-hr Standard**

"One hundred fifty (150) micrograms per cubic meter as a maximum twenty-four (24) hour concentration -- never expected to be exceeded more than once in any calendar year."

IDAPA 58.01.01.577.02 **Sulfur Oxides (Sulfur Dioxide)**

IDAPA 58.01.01.577.02.a **Primary Standards**

IDAPA 58.01.01.577.02.a.i **Annual Standard**

"Eighty (80) micrograms per cubic meter (0.03 ppm), as an annual arithmetic mean–not to be exceeded in any calendar year."

IDAPA 58.01.01.577.02.a.ii **24-hr Standard**

"Three hundred sixty-five (365) micrograms per cubic meter (0.14 ppm), as a maximum twenty-four (24) hour concentration–not to be exceeded more than once in any calendar year."

IDAPA 58.01.01.577.02.b **Secondary Standard**

"Secondary air quality standards are one thousand three hundred (1,300) micrograms per cubic meter (0.50 ppm), as a maximum three (3) hour concentration–not to be exceeded more than once in any calendar year."

IDAPA 58.01.01.577.04 Nitrogen Dioxide

"Primary and secondary air quality standards are one hundred (100) micrograms per cubic meter (0.05 ppm) – annual arithmetic mean."

IDAPA 58.01.01.577.05 Carbon Monoxide Primary and Secondary Standards
IDAPA 58.01.01.577.05.a **8-hr Standard**

"Eight (8) Hour Standard. Ten (10) milligrams per cubic meter (9 ppm) – maximum eight (8) hour concentration not to be exceeded more than once per year."

IDAPA 58.01.01.577.05.b **1-hr Standard**

"One (1) Hour Standard. Forty (40) milligrams per cubic meter (35 ppm) – maximum one (1) hour concentration not to be exceeded more than once per year."

IDAPA 58.01.01.577.7 **Lead**

"Primary and secondary standards for lead and its compounds, measured as elemental lead, are one and one-half (1.5) micrograms per cubic meter (1.5 ug/m3), as a quarterly arithmetic mean -- not to be exceeded in any quarter of any calendar year."

Agro Farma will comply with the regulations outlined in this section.

IDAPA 58.01.01.578
DESIGNATION OF ATTAINMENT, UNCLASSIFIABLE, AND NONATTAINMENT AREAS

The proposed site for the facility, Twin Falls County, is in an attainment or unclassifiable area for NO_x, CO, SO_x, ozone, lead, PM_{10}, and $PM_{2.5}$; the appropriate modeling parameters will reflect this designation.

IDAPA 58.01.01.590
NEW SOURCE PERFORMANCE STANDARDS

Please see compliance review in the federal summary.

IDAPA 58.01.01.591
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Please see compliance review in the federal summary

IDAPA 58.01.01.625
VISIBLE EMISSIONS

1. Cleaver Brooks Boilers
2. Heaters (MAUs, RTUs, and IRHs)

> "A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by this section."

It is proposed that the Agro Farma facility conduct a quarterly inspection of the engine stacks during periods when the boilers and heaters are in operation. The inspection will be conducted during daylight hours and under normal operating conditions. The inspection will consist of a see/no see evaluation. If any visible emissions are present from the point of emission, appropriate corrective action will be taken as expeditiously as practicable, or a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625 will be performed. Records of the results of each visible emission inspection and each opacity test when conducted will be maintained. The records will include, at a minimum, the date and results of each inspection and test and a description of the following: the assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

IDAPA 58.01.01.650
RULES FOR CONTROL OF FUGITIVE DUST

Agro Farma will take all reasonable precautions to prevent the generation of fugitive dust as outlined under IDAPA 58.01.01.650-651.

IDAPA 58.01.01.651
GENERAL RULES

> "All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions may include, but are not limited to, the following:"

IDAPA 58.01.01.651.01 Use Of Water or Chemicals

> "Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land."

IDAPA 58.01.01.651.02 Application Of Dust Suppressants

> "Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust."

IDAPA 58.01.01.651.04 Covering Of Trucks

> "Covering, when practical, open bodied trucks transporting materials likely to give rise to airborne dusts."

IDAPA 58.01.01.651.05 Paving

> "Paving of roadways and their maintenance in a clean condition, where practical."

IDAPA 58.01.01.651.06 Removal Of Materials

> "Prompt removal of earth or other stored material from streets, where practical."

Agro Farma will monitor and maintain records of the frequency and the method(s) used (for example, water) to reasonably control fugitive emissions. A quarterly facility-wide inspection will be conducted of the sources of

fugitive emissions during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the Agro Farma facility will undertake corrective action as expeditiously as practicable. Records of the results of each fugitive emissions inspection will be maintained. The records will include, at a minimum, the date of each inspection and a description of the following: the facilities assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Records will be maintained of all fugitive dust complaints received. Appropriate corrective action will be taken as expeditiously as practicable after receipt of a valid complaint. The records will include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the facilities assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

IDAPA 58.01.01.675
FUEL BURNING EQUIPMENT -- PARTICULATE MATTER

1. Cleaver Brooks Boilers

Agro Farma will adhere to guidelines under IDAPA 58.01.01.675 through IDAPA 58.01.01.681 with regards to particulate emissions for fuel burning equipment.

IDAPA 58.01.01.676
STANDARDS FOR NEW SOURCES

1. Cleaver Brooks Boilers

   "A person shall not discharge into the atmosphere from any fuel burning equipment with a maximum rated input of ten (10) million BTUs per hour or more, and commencing operation on or after October 1, 1979, particulate matter in excess of the concentrations shown in the following table:"

Fuel Type	Allowable Particulate gr/dscf	Emissions, @Oxygen
Gas	0.015	3%

As calculated in Appendix C, the PM emissions from each boiler will comply with the applicable IDAPA standard. The heaters are each rated less than 10 MMBtu/hr. Therefore; the heaters are not applicable to this regulation.

IDAPA 58.01.01.700-701
PARTICULATE MATTER-PROCESS WEIGHT LIMITATIONS

Agro Farma Facility maintains only fuel burning equipment. Therefore, this rule is not applicable to the facility.

IDAPA 58.01.01.775
RULES FOR CONTROL OF ODORS

Agro Farma will follow the guidelines set under IDAPA 58.01.01.775 through IDAPA 58.01.01.776 to control odorous emissions from all sources for which no gaseous emission control rules apply.

IDAPA 58.01.01.776
GENERAL RULES

IDAPA 58.01.01.776.01 General Restrictions

"No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids into the atmosphere in such quantities as to cause air pollution."

Agro Farma will follow the guidelines set under IDAPA 58.01.01.775 through IDAPA 58.01.01.776 to control odorous emissions from all sources for which no gaseous emission control rules apply.

Figures

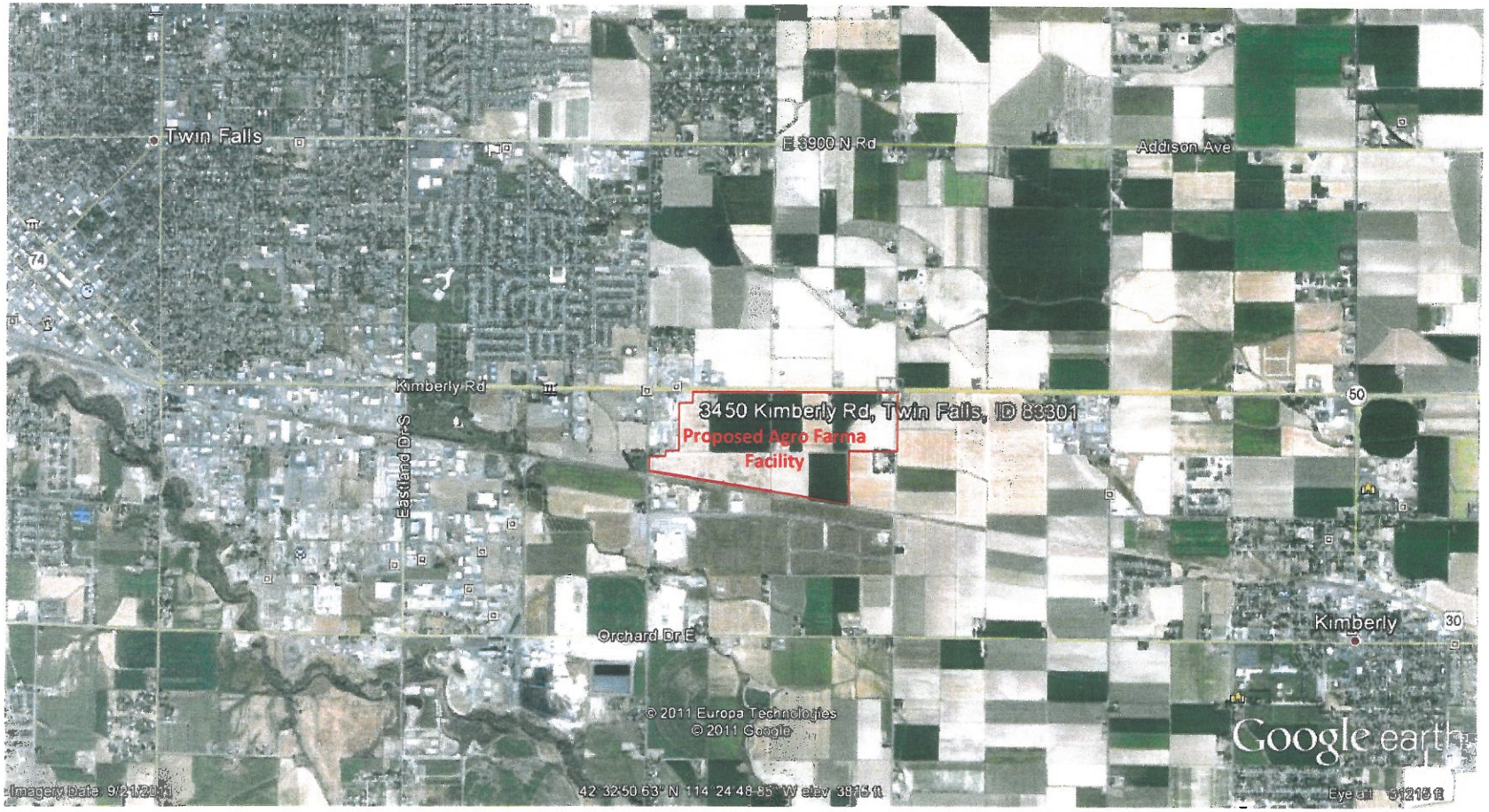


Figure 1

Site Location Map
Agro Farma Twin Falls – Chobani Facility

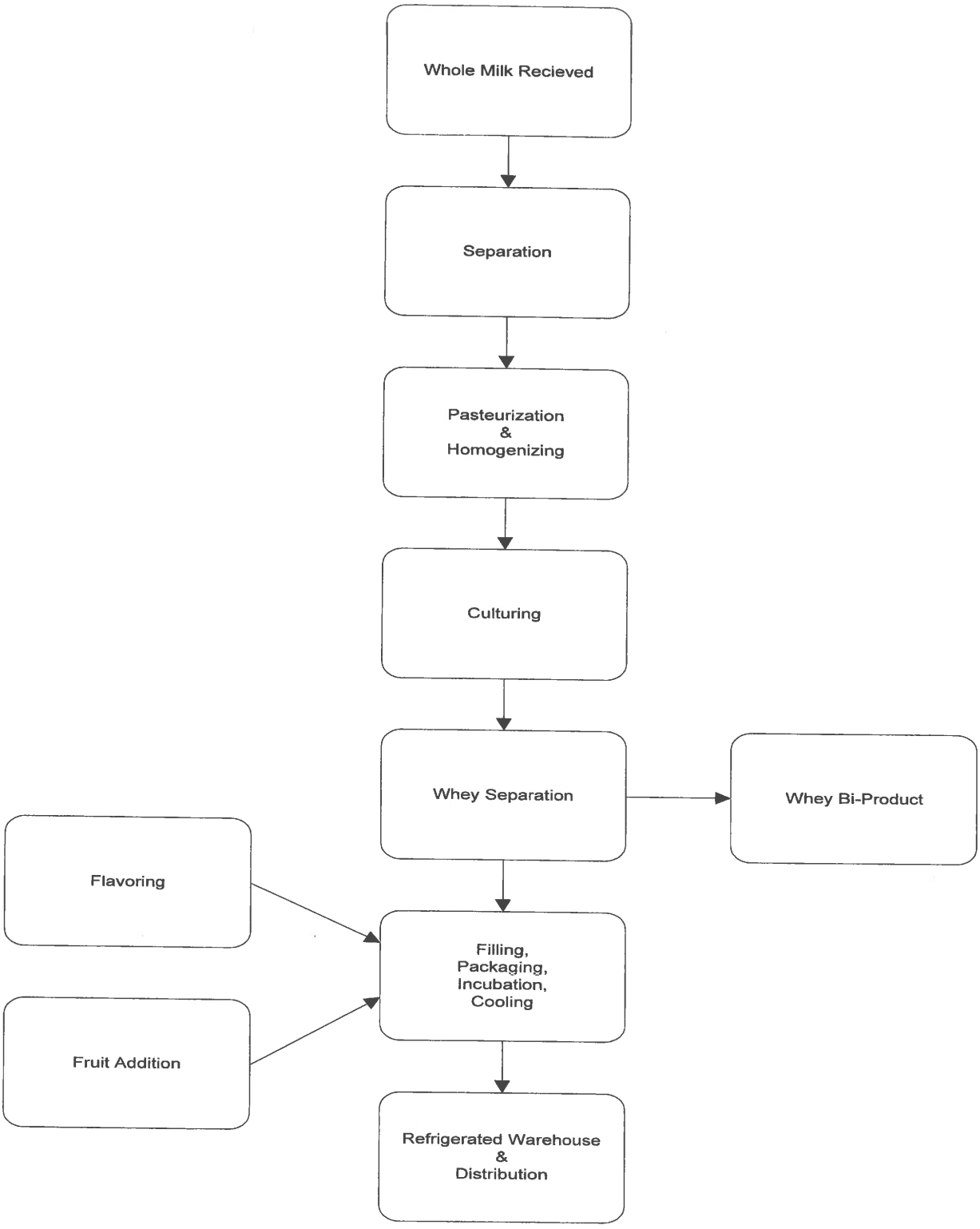
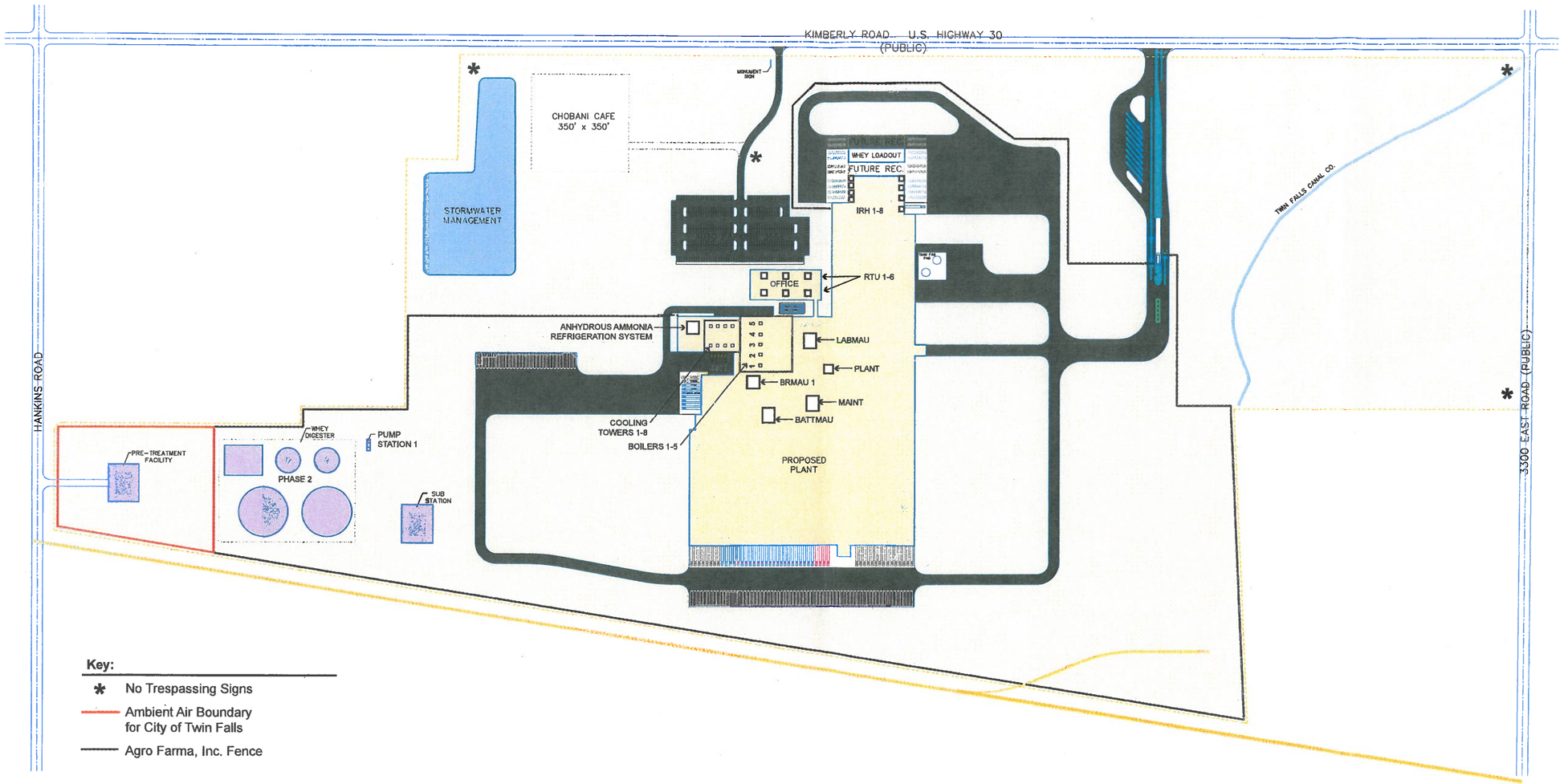


Figure 2

Yogurt Process Flow Diagram
Agro Farma Twin Falls – Chobani Facility

TPPMANN GROUP
PRELIMINARY
FOR INFORMATION ONLY, NOT FOR CONSTRUCTION: 11/30/2011



Key:

* No Trespassing Signs

Ambient Air Boundary for City of Twin Falls

Agro Farma, Inc. Fence

Note:

Ambient Air Boundary for Agro Farma, Inc. is identified by the fence to the south, and fence and no trespassing signs for the area between Hankins Rd, 3300 East Rd, and Kimberly Rd.

N

PROPOSED SITE PLAN
SCALE: 1" = 150'-0"

Figure 3
PROPOSED SITE PLAN
Agro Farma Facility
3450 Kimberly Rd E.
Twin Falls, Idaho. 83301

TC-MS
00-00-2011

C0.1

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Appendix A

IDEQ Application Forms

Department of Environmental Quality
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

15- Day Pre-Permit Construction Approval Application Completeness Checklist

This checklist is designed to aid the applicant in submitting a complete pre-permit construction approval application. This checklist should be completed and submitted with the pre-permit construction approval application.

I. Actions Needed Before Submitting Application

☒ Refer to the Rule. Read the Pre-Permit Construction requirements contained in IDAPA 58.01.01.213, Rules for the Control of Air Pollution in Idaho.

☒ Refer to DEQ's Pre-Permit Construction Approval Guidance Document. DEQ has developed a guidance document to aid applicants in submitting a complete pre-permit construction approval application. The guidance document is located on DEQ's website (go to http://www.deq.idaho.gov/air/permits_forms/permitting/ptc_prepermit_guidance.pdf

☒ Consult with DEQ Representatives. Schedule a pre-application meeting with DEQ to discuss application requirements before submitting the pre-permit construction approval application. Schedule the meeting by contacting the DEQ Air Permit Hotline at **877-5PERMIT**. The meeting can be in person or on the phone. Refer to IDAPA 58.01.01.213.01b.

☒ Schedule Informational Meeting. Schedule an informational meeting before submitting the pre-permit construction approval application for the purposes of satisfying IDAPA 58.01.01.213.02.a. The purpose for the informational meeting is to provide information about the proposed project to the general public. Refer to IDAPA 58.01.01.213.01.c.

☒ Submit Ambient Air Quality Modeling Protocol. It is required that an ambient air quality modeling protocol be submitted to DEQ at least two (2) weeks before the pre-permit construction approval application is submitted. Contact DEQ's Air Quality Hotline at **877-5PERMIT** for information about the protocol.

☒ Written DEQ Approved Protocol. Written DEQ approval of the modeling protocol must be received before the pre-permit construction approval application is submitted. Refer to IDAPA 58.01.01.213.01.c.

II. Application Content

Application content should be prepared using the checklist below. The checklist is based on the requirements contained in IDAPA 58.01.01.213 and DEQ's Pre-Permit Construction Approval Guidance Document.

☒ Pre-Permit Construction Eligibility and Proof of Eligibility. Pre-permit construction approval is not available for any new Prevention of Significant Deterioration (PSD) major source, any proposed PSD major modification, or any proposed major NSR project in a non-attainment area. Emissions netting and emissions offsets are not allowed to be used. A certified proof of pre-permit construction eligibility must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.

☒ Request to Construct Before Obtaining a Permit to Construct. A letter requesting the ability to construct before obtaining the required permit to construct must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.c.

☒ Apply for a Permit to Construct. Submit a Permit to Construct application using forms available on DEQ's website at http://www.deq.idaho.gov. Refer to IDAPA 58.01.01.213.01.a.

☒ Permit to Construct Application Fee. The permit to construct application fee of $1000 must be submitted at the time the original pre-permit construction approval application is submitted. Refer to IDAPA 58.01.01.224. If the pre-permit construction approval is denied and a new application is submitted, a new $1,000 application fee will be required to be submitted. The application fee is not transferable or refundable. The application fee can be paid by check, credit card or Electronic Funds Transfer (EFT). If you choose to pay by credit card or EFT, please refer to the following Access Idaho link:
https://www.accessidaho.org/secure/deq/payport/item.html?id=511
If you choose to pay by check, enclose the check with your pre-permit construction approval application.

☒ Notice of Informational Meeting. Within 10 days after the submittal of the pre-permit construction approval application, an informational meeting must be held in at least one location in the region where the stationary source will be located. The information meeting must be made known by notice published at least 10 days before the informational meeting in a newspaper of general circulation in the county in which the stationary source will be located. A copy of this notice, as published, must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.02.a. Additional information regarding the informational meeting is included in DEQ's Pre-Permit Construction Approval Guidance Document. (go to http://www.deq.idaho.gov/air/permits_forms/permitting/ptc_prepermit_guidance.pdf)

☒ Process Description(s). The process or processes for which pre-permit construction approval is requested must be described in sufficient detail and clarity such that a member of the general public not familiar with air quality can clearly understand the proposed project. A process flow diagram is required for each process for which pre-permit construction approval is requested. Refer to IDAPA 58.01.01.213.01.c.

☒ Equipment List. All equipment that will be used for which pre-permit construction approval is requested must be described in detail. Such description includes, but is not limited to, manufacturer, model number or other descriptor, serial number, maximum process rate, proposed process rate, maximum heat input capacity, stack height, stack diameter, stack gas flowrate, stack gas temperature, etc. All equipment that will be used for which pre-permit construction approval is requested must be clearly labeled on the process flow diagram. Refer to IDAPA 58.01.01.213.01.c.

☒ Scaled Plot Plan. It is required a scaled plot plan be included in the permit to construct application and it must clearly label the location of each proposed process and the equipment that will be used in the process.

☒ Proposed Emissions Limits and Modeled Ambient Concentration for All Regulated Air Pollutants. All proposed emission limits and modeled ambient concentrations for all regulated air pollutants must demonstrate compliance with all applicable air quality rules and regulations. Regulated air pollutants include criteria air pollutants (PM_{10}, SO_x, NO_2, O_3, CO, lead), toxic air pollutants listed pursuant to IDAPA 58.01.01.585 and 586, and hazardous air pollutants listed pursuant to Section 112 of the 1990 Clean Air Act Amendments (go to http://www.epa.gov/ttn/atw/188polls.html). Describe in detail how the proposed emissions limits and modeled ambient concentrations demonstrate compliance with each applicable air quality rule and regulation. It is requested that emissions calculations, assumptions, and documentation be submitted with sufficient detail so DEQ can verify the validity of the emissions estimates. Refer to IDAPA 58.01.01.213.01.c.

☒ Restrictions on a Source's Potential to Emit. Any proposed restriction on a source's potential to emit such that permitted emissions will be either below major source levels or below a significant increase must be described in detail in the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.d.

☒ List all Applicable Air Quality Rules and Regulations. All applicable rules and regulations must be cited by the rule or regulation section/subpart that applies for each emissions unit. Refer to IDAPA 58.01.01.213.01.c.

☒ Certification of Pre-Permit Construction Approval Application. The pre-permit construction approval application must be signed by the Responsible Official and must contain a certification signed by the Responsible Official. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Refer to IDAPA 58.01.01.213.01.d and IDAPA 58.01.01.123.

☒ Submit the Pre-Construction Approval Application. Submit the pre-permit construction approval application and application fee to the following address:

Department of Environmental Quality
Air Quality Division
Stationary Source Program
1410 North Hilton
Boise, ID 83706-1255

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER

1. Company Name	Agro Farma, Inc.	
2. Facility Name	Agro Farms Twin Falls – Chobani Facility	3. Facility ID No.
4. Brief Project Description - One sentence or less	Dairy processing facility that will produce yogurt	

PERMIT APPLICATION TYPE

5. ☒ New Source ☐ New Source at Existing Facility ☐ PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c
☐ Unpermitted Existing Source ☐ Facility Emissions Cap ☐ Modify Existing Source: Permit No.:____ Date Issued:____
☐ Required by Enforcement Action: Case No.:____

6. ☒ Minor PTC ☐ Major PTC

FORMS INCLUDED

Included	N/A	Forms		DEQ Verify
☒	☐	Form CSPTC – Cover Sheet		☐
☒	☐	Form GI – Facility Information		☐
☒	☐	Form EU0 – Emissions Units General		☐
☐	☒	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: ____	☐
☐	☒	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: ____	☐
☐	☒	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: ____	☐
☒	☐	Form EU4– Cooling Tower Information	Please specify number of EU3s attached: 2	☐
☒	☐	Form EU5 – Boiler Information	Please specify number of EU4s attached: 5	☐
☐	☒	Form CBP– Concrete Batch Plant	Please specify number of CBPs attached: ____	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached: ____	☐
☐	☒	PERF – Portable Equipment Relocation Form		☐
☐	☒	Form AO – Afterburner/Oxidizer		☐
☐	☒	Form CA – Carbon Adsorber		☐
☐	☒	Form CYS – Cyclone Separator		☐
☐	☒	Form ESP – Electrostatic Precipitator		☐
☐	☒	Form BCE– Baghouses Control Equipment		☐
☐	☒	Form SCE– Scrubbers Control Equipment		☐
☐	☒	Form VSCE – Venturi Scrubber Control Equipment		☐
☐	☒	Form CAM – Compliance Assurance Monitoring		☐
☒	☐	Forms EI— Emissions Inventory		☐
☒	☐	PP – Plot Plan		☐
☒	☐	Forms MI1 – MI4 – Modeling	(Excel workbook, all 4 worksheets)	☐
☒	☐	Form FRA – Federal Regulation Applicability		☐

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

General Information **Form GI**
Revision 7
2/18/10

Please see instructions on page 2 before filling out the form.

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION

1. Company Name	2. Facility Name
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Facilty

3. Brief Project Description: The proposed Agro Farma Facility will produce yogurt. To produce the yogurt, the new dairy processing facility will operate five natural gas boilers, one anhydrous ammonia refrigeration system containing 8 chillers, and 8 one-cell cooling towers. In addition, three natural gas make-up air unit (MAU) heaters, eight natural gas roof top unit (RTU) heaters, and eight natural gas infrared heaters (IRH) will be used to provide building heat to the offices and facility buildings.

FACILITY INFORMATION

4. Primary Facility Permit Contact Person/Title	John Winnie		Director of Operations; Idaho Facility	
5. Telephone Number and Email Address	(208) 316-7689		john.winnie@agro-farma.com	
6. Alternate Facility Contact Person/Title	Dave Sheldon		Director, Environmental Health and Safety	
7. Telephone Number and Email Address	607-337-1246 Ext 3164		dave.sheldon@agro-farma.com	
8. Address to Which the Permit Should be Sent	3450 Kimberly Rd East			
9. City/County/State/Zip Code	Twin Falls	Twin Falls	Idaho	83301
10. Equipment Location Address (if different than the mailing address above)				
11. City/County/State/Zip Code				
12. Is the Equipment Portable?	☐ Yes ☒ No			
13. SIC Code(s) and NAICS Code	Primary SIC: 2026	Secondary SIC:	NAICS: 311511	
14. Brief Business Description and Principal Product	Dairy processing facility that will produce yougurt			
15. Indentify any adjacent or contiguous facility that this company owns and/or operates	None			

16. Specify the reason for the application

☒ Permit to Construct (PTC)

For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.

- ☐ Incorporate the PTC at the time of the Tier I renewal
- ☐ Co-process the Tier I modification and PTC
- ☐ Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c)

☐ Tier I Permit
☐ Tier II Permit
☐ Tier II/Permit to Construct

CERTIFICATION

In accordance with **IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho)**, I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

17. Responsible Official's Name/Title	David Sheldon	Director Environmental Health and Safety

18. Responsible Official's Signature		Date:	1-16-2012
19. ☐ Check here to indicate that you would like to review the draft permit prior to final issuance.			

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	ANHYDROUS AMMONIA REFRIGERATION SYSTEM-11 CHILLERS
6.	EU ID Number:	REFRIG
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	
9.	Model:	
10..	Maximum Capacity:	14,850 LB
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. **Control Equipment Name and ID:**

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☒ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline -- 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	BOILER ROOM MAKEUP AIR UNIT HEATER
6.	EU ID Number:	BRMAU1
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	RUPP AIR
9.	Model:	RAM 225
10..	Maximum Capacity:	3,586,957 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	BATTERY MAKEUP AIR UNIT HEATER
6.	EU ID Number:	BATTMAU
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	RUPP AIR
9.	Model:	RAM 222
10..	Maximum Capacity:	3,586,957 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
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Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	LAB MAKEUP AIR UNIT HEATER
6.	EU ID Number:	LABMAU
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	AAON
9.	Model:	RN-050
10..	Maximum Capacity:	810,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAINTENANCE/PARTS/FAB ROOF TOP UNIT HEATER
6.	EU ID Number:	MAINT
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,S,060
10..	Maximum Capacity:	1,164,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MEETING/RR/PLANT OFFICES ROOF TOP UNIT HEATER
6.	EU ID Number:	PLANT
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,S,020
10..	Maximum Capacity:	350,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
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Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 1
6.	EU ID Number:	RTU1
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 2
6.	EU ID Number:	RTU2
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. **Control Equipment Name and ID:**

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 3
6.	EU ID Number:	RTU3
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 4
6.	EU ID Number:	RTU4
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 5
6.	EU ID Number:	RTU5
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Facilty	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	MAIN OFFICE ROOF TOP UNIT HEATER 6
6.	EU ID Number:	RTU6
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	CARRIER
9.	Model:	48A5,T,030
10..	Maximum Capacity:	520,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	RECEIVING BAY INFRARED HEATER HEATER 1
6.	EU ID Number:	IRH1
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	REZNOR
9.	Model:	VR-200-60
10..	Maximum Capacity:	200,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	RECEIVING BAY INFRARED HEATER HEATER 2
6.	EU ID Number:	IRH2
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	REZNOR
9.	Model:	VR-200-60
10..	Maximum Capacity:	200,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

☐ Operation Hour Limit(s):

☐ Production Limit(s):

☐ Material Usage Limit(s):

☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports

☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	RECEIVING BAY INFRARED HEATER HEATER 3
6.	EU ID Number:	IRH3
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source – Previous Permit #: Date Issued:
8.	Manufacturer:	REZNOR
9.	Model:	VR-200-60
10..	Maximum Capacity:	200,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	RECEIVING BAY INFRARED HEATER HEATER 4
6.	EU ID Number:	IRH4
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	REZNOR
9.	Model:	VR-200-60
10..	Maximum Capacity:	200,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Faciltiy	

4. Brief Project Description: Dairy processing facility that will produce yougurt

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	RECEIVING BAY INFRARED HEATER HEATER 5
6.	EU ID Number:	IRH5
7.	EU Type:	☒ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	REZNOR
9.	Model:	VR-200-60
10..	Maximum Capacity:	200,000 BTU/HR
11.	Date of Construction:	AFTER ISSUANCE OF PEMIT TO CONSTRUCT
12.	Date of Modification (if any):	NOT APPLICABLE
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	8,760 HOURS/YEAR
23.	Maximum Operation:	8,760 Hours/Year

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Cooling Towers Information **Form EU4**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Facility	
4. Brief Project Description:	Dairy processing facility that will produce yougurt	

COOLING TOWER IDENTIFICATION AND DESCRIPTION

	Tower 1	Tower 2	Tower 3	Tower 4
5. Emission Unit Name	Cooling Tower 1	Cooling Tower 2	Cooling Tower 3	Cooling Tower 4
6. Emission Unit ID Number	CT01	CT02	CT03	CT04
7. Stack/Vent ID Number	CT01	CT02	CT03	CT04
8. Tower Type (N: New, U: Unpermitted, M: Modification)	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M
9. Current Permit Number	Not Applicable	Not Applicable	Not Applicable	Not Applicable
10. Tower Construction Date	Upon Issuance of PTC	Upon Issuance of PTC	Upon Issuance of PTC	Upon Issuance of PTC
11. Tower Manufacturer				
12. Tower Model Number				
13. Number of Cells in Tower	1	1	1	1
14. Tower Maximum Water Flow Rate				
15. Measured TDS Content (if known)	1500 mg/L or ppmw	1500 mg/L or ppmw	1500 mg/L or ppmw	1500 mg/L or ppmw
16. Do you use additives in the water? If Yes, provide an MSDS form for each additive	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes

CONTROL EQUIPMENT INFORMATION

17. Control Equipment	☐ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes
18. Control Equipment ID Number				
19. Control Equipment Efficiency				

OPERATING SCHEDULE

20. Actual Operation (hours per year)	8760	8760	8760	8760
21. Maximum Operation (hours per year)	24	24	24	24

REQUEST FOR PERMIT LIMITATIONS

22 Are you requesting any permit limits? ☒ No ☐ Yes. If Yes, fill in all that apply below.

Tower Served	Operation Hour Limits:	TDS Limits (ppm):	Material Usage Limits:	Other:
Tower 1				
Tower 2				
Tower 3				
Tower 4				

23. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Cooling Towers Information **Form EU4**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Agro Farma, Inc.	Agro Farma Twin Falls - Chobani Facility	
4. Brief Project Description:	Dairy processing facility that will produce yougurt	

COOLING TOWER IDENTIFICATION AND DESCRIPTION

	Tower 1	Tower 2	Tower 3	Tower 4
5. Emission Unit Name	Cooling Tower 1	Cooling Tower 2	Cooling Tower 3	Cooling Tower 4
6. Emission Unit ID Number	CT05	CT06	CT07	CT08
7. Stack/Vent ID Number	CT05	CT06	CT07	CT08
8. Tower Type (N: New, U: Unpermitted, M: Modification)	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M	☒ N, ☐ U, ☐ M
9. Current Permit Number	Not Applicable	Not Applicable	Not Applicable	Not Applicable
10. Tower Construction Date	Upon Issuance of PTC	Upon Issuance of PTC	Upon Issuance of PTC	Upon Issuance of PTC
11. Tower Manufacturer				
12. Tower Model Number				
13. Number of Cells in Tower	1	1	1	1
14. Tower Maximum Water Flow Rate				
15. Measured TDS Content (if known)	1500 mg/L or ppmw	1500 mg/L or ppmw	1500 mg/L or ppmw	1500 mg/L or ppmw
16. Do you use additives in the water? If Yes, provide an MSDS form for each additive	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes

CONTROL EQUIPMENT INFORMATION

17. Control Equipment	☐ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes	☒ No ☐ Yes
18. Control Equipment ID Number				
19. Control Equipment Efficiency				

OPERATING SCHEDULE

20. Actual Operation (hours per year)	8760	8760	8760	8760
21. Maximum Operation (hours per year)	24	24	24	24

REQUEST FOR PERMIT LIMITATIONS

22 Are you requesting any permit limits? ☒ No ☐ Yes. If Yes, fill in all that apply below.

Tower Served	Operation Hour Limits:	TDS Limits (ppm):	Material Usage Limits:	Other:
Tower 1				
Tower 2				
Tower 3				
Tower 4				

23. Rationale for Requesting the Limit(s):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Industrial Boiler Information **Form EU5**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3 Facility ID No:
Agro Farma	Agro Farma Twin Falls - Chobain Facility	32.659
4. Brief Project Description:	Dairy processing facility that will produce yougurt	

EXEMPTION

Please see IDAPA 58.01.01.222 for a list of industrial boilers that are exempt from Permit to Construct requirements.

BOILER (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

5. Type of Request: ☒ New Unit ☐ Unpermitted Existing Unit ☐ Modification to a Unit with Permit #:

6. Use of Boiler: ☒ % Used For Process ☐ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:

7. Boiler ID Number: Cleaver Brooks Boiler1	8. Rated Capacity: ☒ Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
9. Construction Date: Upon Issuance of PTC	10. Manufacturer: Cleaver Brooks	11. Model: CBLE-700-800
12. Date of Modification (if applicable): Not Applicable	13. Serial Number (if available): Not Yet Available	14. Control Device (if any): None **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

15. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☒ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☐ Other Fuels (unit: /hr)
16. Full Load Consumption Rate		32,000		
17. Actual Consumption Rate		32,000		
18. Fuel Heat Content (Btu/unit, LHV)		1,020		
19. Sulfur Content wt%		0.2 gr/dscf		
20. Ash Content wt%		N/A		

STEAM DESCRIPTION AND SPECIFICATIONS

21. Steam Heat Content	NA	NA		
22. Steam Temperature (°F)	N/A	N/A		
23. Steam Pressure (psi)	N/A	N/A		
24 Steam Type	N/A	N/A	☐ Saturated ☐ Superheated	☐ Saturated ☐ Superheated

OPERATING LIMITS & SCHEDULE

25. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):	8760 hours/year	
26. Operating Schedule (hours/day, months/year, etc.):	24 hours/day	
27. NSPS Applicability: ☒ Yes ☐ No	If Yes, which subpart:	40 CFR Part 60 Subpart Dc

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Industrial Boiler Information **Form EU5**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3 Facility ID No:
Agro Farma	Agro Farma Twin Falls - Chobain Facility	32.659

4. Brief Project Description: Dairy processing facility that will produce yougurt

EXEMPTION

Please see IDAPA 58.01.01.222 for a list of industrial boilers that are exempt from Permit to Construct requirements.

BOILER (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

5. Type of Request: ☒ New Unit ☐ Unpermitted Existing Unit ☐ Modification to a Unit with Permit #:

6. Use of Boiler: ☒ % Used For Process ☐ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:

7. Boiler ID Number: Cleaver Brooks Boiler2	8. Rated Capacity: ☒ Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
9. Construction Date: Upon Issuance of PTC	10. Manufacturer: Cleaver Brooks	11. Model: CBLE-700-800
12. Date of Modification (if applicable): Not Applicable	13. Serial Number (if available): Not Yet Available	14. Control Device (if any): None **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

15. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☒ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☐ Other Fuels (unit: /hr)
16. Full Load Consumption Rate		32,000		
17. Actual Consumption Rate		32,000		
18. Fuel Heat Content (Btu/unit, LHV)		1,020		
19. Sulfur Content wt%		0.2 gr/dscf		
20. Ash Content wt%		N/A		

STEAM DESCRIPTION AND SPECIFICATIONS

21. Steam Heat Content	NA	NA		
22. Steam Temperature (°F)	N/A	N/A		
23. Steam Pressure (psi)	N/A	N/A		
24 Steam Type	N/A	N/A	☐ Saturated ☐ Superheated	☐ Saturated ☐ Superheated

OPERATING LIMITS & SCHEDULE

25. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):		8760 hours/year	
26. Operating Schedule (hours/day, months/year, etc.):		24 hours/day	
27. NSPS Applicability: ☒ Yes ☐ No	If Yes, which subpart:	40 CFR Part 60 Subpart Dc	

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
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Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Industrial Boiler Information **Form EU5**
Revision 5
08/28/08

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	3 Facility ID No:
Agro Farma	Agro Farma Twin Falls - Chobain Facility	32.659
4. Brief Project Description:	Dairy processing facility that will produce yougurt	

EXEMPTION

Please see IDAPA 58.01.01.222 for a list of industrial boilers that are exempt from Permit to Construct requirements.

BOILER (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

5. Type of Request: ☒ New Unit ☐ Unpermitted Existing Unit ☐ Modification to a Unit with Permit #:

6. Use of Boiler: ☒ % Used For Process ☐ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:

7. Boiler ID Number: Cleaver Brooks Boiler3	8. Rated Capacity: ☒ Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
9. Construction Date: Upon Issuance of PTC	10. Manufacturer: Cleaver Brooks	11. Model: CBLE-700-800
12. Date of Modification (if applicable): **Not Applicable**	13. Serial Number (if available): **Not Yet Available**	14. Control Device (if any): None **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

15. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☒ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☐ Other Fuels (unit: /hr)
16. Full Load Consumption Rate		32,000		
17. Actual Consumption Rate		32,000		
18. Fuel Heat Content (Btu/unit, LHV)		1,020		
19. Sulfur Content wt%		0.2 gr/dscf		
20. Ash Content wt%		N/A		

STEAM DESCRIPTION AND SPECIFICATIONS

21. Steam Heat Content	NA	NA		
22. Steam Temperature (°F)	N/A	N/A		
23. Steam Pressure (psi)	N/A	N/A		
24 Steam Type	N/A	N/A	☐ Saturated ☐ Superheated	☐ Saturated ☐ Superheated

OPERATING LIMITS & SCHEDULE

25. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):		8760 hours/year	
26. Operating Schedule (hours/day, months/year, etc.):		24 hours/day	
27. NSPS Applicability: ☒ Yes ☐ No	If Yes, which subpart:	40 CFR Part 60 Subpart Dc	

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Agro Farma, Inc.
Facility Name:	Agro Farma Twin Falls - Chobani Facility
Facility ID No.:	
Brief Project Description:	Dairy Processing Facility that will produce yogurt

SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS

		1.		2.	3.	4.		5.
Criteria Pollutants	**Averaging Period**	**Significant Impact Analysis Results (µg/m3)**	**Significant Contribution Level (µg/m3)**	**Full Impact Analysis Results (µg/m3)**	**Background Concentration (µg/m3)**	**Total Ambient Impact (µg/m3)**	**NAAQS (µg/m3)**	**Percent of NAAQS**
PM_{10}	24-hour	7.00	5	7.04	52.00	59.04	150	39%
	Annual	NA	1	NA	NA	NA	50	
PM2.5	24-hour	7.00	1.2	7.04	21.30	28.34	35	81%
	Annual	1.56	0.3	1.56	7.20	8.76	15	58%
SO_2	1-hr	NA	NA	NA	NA	NA	1300	
	3-hr	NA	NA	NA	NA	NA	365	
	Annual	NA	NA	NA	NA	NA	80	
NO_2	1-hr	178.00	7.5	**	hourly data provided	**	100	See modeling memo for evaluation of 1-hour NO2
NO_2	Annual	7.70	1	modeled concentrations include background	hourly data provided	81.10	100	81%
CO	1-hr	NA	2000	NA	NA		10000	
	8-hr	NA	500	NA	NA		40000	

Instructions for Form MI1

This form is designed to provide the air quality modeler with a summary of the air impact analysis results for the criteria pollutants. This information will be used by IDEQ to determine compliance demonstration with the national ambient air quality standards (NAAQS).

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

Significant Impact Analysis - Evaluates the emissions increase from the proposed project only. This analysis determines whether or not a proposed project has a significant impact on ambient air, and therefore, requires a full impact analysis.

Full Impact Analysis - Only required if the significant impact analysis exceeds the significant contribution level - evaluates the emissions from the facility, including the emissions increase from the proposed project. This analysis determines whether the facility, with the emissions increase, complies with the NAAQS.

1. Provide the results of the significant impact analysis in $\mu g/m^3$.
2. Provide the results of the full impact analysis in $\mu g/m^3$ (if required).
3. List the background concentration in mg/m3. Contact the Stationary Source Modeling Coordinator at (208) 373-0502 for the current background concentrations for the area of interest. (Not needed if full impact analysis is not required.)
4. Provide the total ambient impact in mg/m3. The total ambient impact is the sum of the background concentration and the full impact analysis result.
5. Calculate the percent of the NAAQS that the total ambient impact analysis represents.

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 3/27/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Agro Farma, Inc.
Facility Name:	Agro Farma Twin Falls - Chobani Facility
Facility ID No.:	
Brief Project Description:	Dairy Processing Facility that will produce yogurt

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Stack Height (m)**	**Modeled Diameter (m)**	**Stack Exit Temperature (K)**	**Stack Exit Flowrate (acfm)**	**Stack Exit Velocity (m/s)**	**Stack orientation (e.g., horizontal, rain cap)**
Point Source(s)										
name of the emissions unit1	Boiler1	712,670.00	4,713,665.00	1,162.00	15.85	0.61	472.04		18.86	DEFAULT
name of the emissions unit2	Boiler2	712,670.00	4,713,660.00	1,162.00	15.85	0.61	472.04		18.86	DEFAULT
name of the emissions unit3	Boiler3	712,670.00	4,713,655.00	1,162.00	15.85	0.61	472.04		18.86	DEFAULT
name of the emissions unit4	Boiler4	712,670.00	4,713,650.00	1,162.00	15.85	0.61	472.04		18.86	DEFAULT
name of the emissions unit5	Boiler5	712,670.00	4,713,645.00	1,162.00	15.85	0.61	472.04		18.86	DEFAULT
name of the emissions unit6	BRMAU1	712,618.94	4,713,634.23	1,162.00	14.63	1.27	313.00		15.24	HORIZONTAL
name of the emissions unit7	LABMAU	712,683.54	4,713,621.31	1,162.00	14.63	0.50	313.00		15.24	HORIZONTAL
name of the emissions unit8	BATTMAU	712,618.94	4,713,614.85	1,162.00	14.63	1.27	313.00		15.24	HORIZONTAL
name of the emissions unit9	RTU1	712,535.00	4,713,635.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit10	RTU2	712,555.00	4,713,635.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit11	RTU3	712,575.00	4,713,635.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit12	RTU4	712,535.00	4,713,650.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit13	RTU5	712,555.00	4,713,650.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit14	RTU6	712,575.00	4,713,650.00	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit15	PLANT	712,683.54	4,713,608.39	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit16	MAINT	712,670.62	4,713,621.31	1,162.00	14.63	0.50	313.00		15.24	DEFAULT
name of the emissions unit17	CT01	712,450.00	4,713,600.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
name of the emissions unit18	CT02	712,460.00	4,713,600.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
name of the emissions unit19	CT03	712,470.00	4,713,600.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
name of the emissions unit20	CT04	712,480.00	4,713,600.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
name of the emissions unit21	CT05	712,450.00	4,713,580.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
	CT06	712,460.00	4,713,580.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
	CT07	712,470.00	4,713,580.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
	CT08	712,480.00	4,713,580.00	1,162.00	23.47	3.96	300.00		11.43	DEFAULT
(insert more rows as needed)										

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Agro Farma, Inc.
Facility Name:	Agro Farma Twin Falls - Chobani Facilty
Facility ID No.:	
Brief Project Description:	Dairy Processing Facilty that will produce yogurt

FUGITIVE SOURCE PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North (°)	Initial Vertical Dimension (m)	Initial Horizontal Dimension (m)
Area Source(s)										
Volume Source(s)										
Receiving Bay Infrared Heater 1	IRH1	712,635.00	4,713,745.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 2	IRH2	712,635.00	4,713,750.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 3	IRH3	712,635.00	4,713,755.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 4	IRH4	712,635.00	4,713,760.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 5	IRH5	712,675.00	4,713,745.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 6	IRH6	712,675.00	4,713,750.00	1,162.00	8.53				0.02	3.97
Receiving Bay Infrared Heater 7	IRH7	712,675.00	4,713,755.00	1,162.00	8.53				0.02	3.97

Receiving Bay Infrared Heater 8	IRH8	712,675.00	4,713,760.00	1,162.00	8.53				0.02	3.97
(insert more rows as needed)										

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Agro Farma, Inc
Facility Name:	Agro Farma Twin Falls - Chobani Facility
Facility ID No.:	
Brief Project Description:	Dairy processing facility that will produce yogurt

BUILDING AND STRUCTURE INFORMATION

1.	2.	3.	4.	5.	6.	7.
Building ID Number	**Length (ft)**	**Width (ft)**	**Base Elevation (m)**	**Building Height (m)**	**Number of Tiers**	**Description/Comments**
plant	787.00	1292.00	26.21		2	Tier 1 height 13.7m
Office	246.00	115.00	8.53		1	
CAFE	350.00	350.00	6.10		1	
plant2	196.00	98.00	8.53		1	
(insert more rows as needed)						

This form is designed to provide the air quality modeler with information on the buildings and structures located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the building ID number.
2. Provide the length of the building.
3. Provide the width of the building.
4. Provide the base elevation of the building. This elevation must be calculated by the same method as the sources and receptor elevation.
5. Provide the height of the building, from the ground.
6. Provide the number of tiers on the building. Refer to the State of Idaho Modeling Guideline for guidance on this topic.
7. Provide a description of the building.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

AIR PERMIT APPLICATION

Revision 6
10/7/09

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION	
1. Company Name: Agro Farma, Inc.	2. Facility Name: Agro Farma Twin Falls - Chobani Facility
3. Brief Project Description:	Dairy processing facility that will produce yougurt

APPLICABILITY DETERMINATION	
4. List applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60). Examples of NSPS affected emissions units include internal combustion engines, boilers, turbines, etc. The applicant must thoroughly review the list of affected emissions units.	List of applicable subpart(s): **Natural Gas Boilers - 40 CFR Part 60 Subpart Dc**
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR part 61 and 40 CFR part 63. Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. EPA has a web page dedicated to NESHAP that should be useful to applicants.	List of applicable subpart(s): **None Applicable** **Reviewed - Determined to be Not Applicable** 40 CFR Part 63; Subpart Q – NESHAP for Industrial Process Cooling Towers 40 CFR Part 63;Subpart DDDDD—NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR Part 63; Subpart JJJJJ – NESHAP for Industrial, Commercial, and Institutional Boilers at Area Sources
6. For each subpart identified above, conduct a complete a regulatory analysis using the instructions and referencing the example provided on the following pages. **Note** - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation applies. Regulatory reviews that are submitted with insufficient detail will be determined incomplete.	☐ A detailed regulatory review is provided (Follow instructions and example). ☐ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date.

Appendix B

Public Meeting Announcement

Affidavit of Publication

STATE OF IDAHO)
COUNTY OF TWIN FALLS) SS.

I, Ruby Aufderheide, being first duly sworn upon oath, depose and say that I am Legal Clerk of the TIMES-NEWS,published daily at, Twins Falls, Idaho, and do solemnly swear that a copy of the notice of advertisement, as per clipping attached, was published in the regular and entire issue of said newspaper, and not in any supplement thereof, for one ~~consecutive~~ publication, commencing with the issue dated 7th day of January, 2012 and ending with the issue dated 7th day of January, 2012

And I do further certify that said newspaper is a consolidation, effective February 16, 1942, of the Idaho Evening Times, published theretofore daily except Sunday, and the Twin Falls News, published theretofore daily except Monday, both of which newspapers prior to consolidation had been published under said names in said city and county continuously and uninterruptedly during a period of more than twelve consecutive months, and said TIMES-NEWS, since such consolidation, has been published as a daily newspaper except Saturday, until July 31, 1978, at which time said newspaper began daily publication under said name in said city and county continuously and uninterrupted.

And I further certify that pursuant to Section 60-108 Idaho Code, Thursday of each week has been designated as the day on which legal notice by law or by order of any court of competent jurisdiction within the state of Idaho to be issued thereof Thursday is announced as the day on which said legal will be published.

Ruby Aufderheide

Ruby Aufderheide, Legal Clerk

STATE OF IDAHO
COUNTY OF TWIN FALLS

On this 9th day of January, 2012, before me,

a Notary Public, personally appeared Ruby Aufdeheide,
known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that he executed the same.

Linda Capps McGuire

Notary Public for Idaho
Residing at Twin Falls, Idaho.

My commision expires: 5-19-15

PUBLIC MEETING ANNOUNCEMENT
AGRO FARMA, INC.
CHOBANI PLANT
TWIN FALLS, IDAHO

An informational meeting will be held at the City Council Chambers located at 305 Third Ave. East in Twin Falls, Idaho from 6 to 8 PM on Wednesday January 18, 2012 in accordance with the Rules for the Control of Air Pollution in Idaho, Idaho Administrative Code, IDAPA 58.01.01.213.02 - Permit to Construct Procedures For Pre-Permit Construction.

The purpose of the meeting is to inform the general public of Agro Farma's, Inc. air quality impacts associated with a new dairy processing plant. Air quality impacts will primarily be from natural gas-boiler combustion operations. In addition, this meeting will serve to fulfill the air quality pre-permit construction requirement per IDAPA 58.01.01.213.02.

PUBLISH: January 7, 2012

LINDA CAPPS-McGUIRE
NOTARY PUBLIC
STATE OF IDAHO

Appendix C

Justification Memorandum

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON, BOISE, ID 83706 · (208) 373-0502

C. L. "BUTCH" OTTER, GOVERNOR
TONI HARDESTY, DIRECTOR

January 13, 2012

VIA EMAIL

Rick McCormick, Project Manager
CH2M HILL
322 E. Front St. Suite 200
Boise, ID 83702

RE: Agro Farma, Inc. – Chobani Facility and Twin Falls Wastewater Pre-Treatment Facility, Twin Falls
Separate Facilities Concurrence

Dear Mr. McCormick:

On January 5, 2012, the Department Environmental Quality (DEQ) received a Justification Memorandum entitled " Demonstration that the Agro Farma Twin Falls – Chobani Facility and City of Twin Falls Wastewater Pre-Treatment Facilities are Separate Facilities" from CH2M HILL.

DEQ concurs that the Agro Farma Chobani Facility and the City of Twin Falls Wastewater Pre-Treatment Facility are separate facilities based on the following information provided in the Justification Memorandum:

- The facilities do not belong to the same major industrial group. The SIC code for Agro Farma is 2026 and the SIC code for the City of Twin Falls Pre-Treatment Facility is 4952.

- The facilities do not share common control. The City of Twin Falls Pre-Treatment Facility is owned by the City of Twin Falls Wastewater Department, a government entity, while the Agro Farma Facility is owned by Agro Farms, a private entity. The facilities do not share a common workforce, plant managers, security forces, corporate executive officers, or board of executives. The facilities also have separate administrative functions.

- The City of Twin Falls Pre-Treatment Facility will not be a support facility for the Agro Farma Facility. There is no contract between the facilities which requires the Agro Farma wastewater discharges be treated by the pre-treatment facility. In addition, the City of Twin Falls is not contractually restricted to accepting only wastewater from the Agro Farma facility and may at any time use the pre-treatment facility to treat other wastewater flows.

In concurring that the Agro Farma Chobani Facility and the City of Twin Falls Wastewater Pr-Treatment Facility are separate facilities, each facility is required to obtain and maintain permits for its own equipment. Compliance with air quality requirements resides with each facility and the conditions contained in any respective permit.

If you have any questions about this letter or about the air quality permitting process, please contact me at (208) 373-0502 or kelli.wetzel@deq.idaho.gov.

Sincerely,

Kelli Wetzel

Kelli Wetzel
Permit Writer
Air Quality Division

Justification Memorandum – Demonstration that the Agro Farma Twins Falls - Chobani Facility and City of Twin Falls Wastewater Pre-Treatment Facility are Separate Facilities

PREPARED FOR: Idaho Department of Environmental Quality

COPY TO: Dave Sheldon/Agro Farma
Jackie Fields/City of Twin Falls

PREPARED BY: CH2M HILL Engineers, Inc. on behalf of Agro Farma, Inc.

DATE: January 5, 2012

Agro Farma, Inc. (Agro Farma) is proposing to construct a dairy processing facility in Twin Falls, Idaho. In addition Agro Farma plans to lease a parcel of land to the City of Twin Falls for the construction and operation of a wastewater pre-treatment facility. The proposed parcel of land where the City of Twin Falls Wastewater Pre-Treatment Facility will be located will be contiguous/adjacent to the proposed Agro Farma dairy processing facility. As such, Agro Farma has tasked CH2M HILL Engineers, Inc. (CH2M HILL) to prepare this memorandum to demonstrate that the proposed Agro Farma Twin Falls-Chobani Facility (Agro Farma Facility) and the City of Twin Falls Wastewater Pre-Treatment Facility (City of Twin Falls Pre-Treatment Facility) should be regulated and regarded as two separate emission sources (facilities). The following sections provide a description of each proposed facility, along with the analysis used to determine the justification for separate facility designations.

1 Overview of Proposed Operations

The following provides an overview of the two proposed facilities.

1.1 Agro Farma Facility

The Agro Farma Facility will be a dairy processing facility. The primary Standard Industrial Classification (SIC) code for the facility will be 2026 – *Fluid Milk (Except Ultra High Temperature)*. The North American Industry Classification System (NAICS) code for the facility will be *NAICS – 311511 – Fluid Milk Manufacturing.*

The Agro Farma Facility will be a new minor source and will be the primary activity. Permitted sources at the dairy processing facility will include nine natural gas boilers, four make-up air natural gas heaters, eight natural gas rooftop heaters, eight natural gas infrared heaters, 12 cooling towers, and one anhydrous ammonia refrigeration system consisting of eleven chillers. The facility is currently in the process of obtaining a Pre-Construction Permit.

1.2 City of Twin Falls Pre-Treatment Facility

The City of Twin Falls Pre-Treatment Facility will be a wastewater treatment facility. The primary SIC code for the facility will be 4952 – *Sewage Systems*. The NAICS code for the facility will be NAICS – 221320 – Sewage Treatment Systems.

The City of Twin Falls Pre-Treatment Facility will be a new minor source facility. Construction of the wastewater pre-treatment facility is anticipated to begin in the spring of 2012. The City of Twin Falls will own and operate the facility, which will be constructed on land that the City of Twin Falls will lease from Agro Farma.

2. Analysis for Determination of One or Two Facilities

To determine if the Agro Farma Facility and the City of Twin Falls Pre-Treatment Facility should be one facility or if they should be two separate facilities for the purposes of minor source, Prevention of Significant Deterioration (PSD), and/or Title V permitting programs, it must be determined how each operation meets the definition of a facility, as defined by the Idaho Administrative Procedures Act (IDAPA) 58.01.01 (Rules for the Control of Air Pollution in Idaho) and the corresponding definition of a source under 40 Code of Federal Regulations (CFR) 52.21.

As a conservative measure, the analysis was performed with respect to both the State of Idaho definition of a facility and the corresponding federal definition of a source. However, it should be noted that as each facility is a minor source and PSD and Title V permitting issues are therefore not applicable.

> ***Facility*** *– is defined as all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (same two-digit SIC code). Fugitive emissions shall not be considered unless considered by federal law*[1].

All three criteria identified in the definition of "facility" must be met to establish that two collocated facilities are a single stationary source at a site. The three criteria used to determine if two facilities should be regarded as separate sources or as a single source are summarized as follows:

- "contiguous or adjacent properties"
- "single major industrial grouping"
- "common control"

If all three regulatory criteria are not met then the two facilities are separate facilities. The applicability of each of these three criteria with regards to the Agro Farma Facility and City of Twin Falls Pre-Treatment Facility are discussed below in further detail.

2.1 Contiguous or Adjacent Properties

The first consideration for establishing separate facilities is identifying that all the stationary sources are not located on "contiguous or adjacent" properties. "Contiguous or adjacent" properties are adjoining, except for an intervening road, railroad, right-of-way, waterway, or similar situations.

The City of Twin Falls will be leasing the land from Agro Farma upon which the wastewater pre-treatment facility will be constructed. As such, both facilities will be located on contiguous/adjacent properties.

2.2 Single Major Industrial Grouping

The SIC code for Agro Farma Facility – is [20]26). The SIC code for the City of Twin Falls Pre-Treatment Facility is [49]52. Therefore, the facilities do not belong to the same major industrial group as two-digit SIC codes for each facility do not match. However, the United States Environmental Protection Agency's (EPA) contemporaneous interpretation of PSD regulations is that each facility is to be classified according to its primary activity that is determined by its principal product or group of products, but that there are situations where co-located facilities with different SIC groups may be aggregated if one of the facilities is classified as a "support facility" to the primary activity.2

A support facility is defined as a facility that conveys, stores, or otherwise assists the production of the principal product (primary activity)3. In these situations, the co-located "support facility" is considered to be part of the primary activity; hence, a one facility determination.

The primary activity is determined by what brings in the most receipts or revenues. If a facility performs more than one type of operation, whichever operation generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged.4 Based on this definition, the primary activity would be

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[1] Reference IDAPA 58.01.01.006.40 and 40 CFR 52.21

[2] *Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans*, 45 Fed. Reg. 52676, 52695 (August 7, 1980).

[3] *New Source Review Workshop Manual, Draft 1990,* New Source PSD Applicability Determinations, Definition of Source, pg. A.3

dairy processing and therefore, the Agro Farma Facility is the primary activity. The auxiliary activity would be the City of Twin Falls Pre-Treatment Facility.

The issue addressed under this part of the analysis is whether the auxiliary facility (the City of Twin Falls Pre-Treatment Facility) is a contract-for service entity that supports the Agro Farma Facility. The Environmental Protection Agency (EPA) policy is that if more than 50 percent of the output or services provided by one facility is dedicated to another facility, then a support facility relationship is presumed. The presumption can be rebutted based on financial, functional, contractual, and legal factors. These include but are not limited to: (1) the degree to which the supporting activity receives materials or services from the primary activity (indicating a mutually beneficial arrangement), (2) the degree to which the primary facility exerts control over the support activity's operations, (3) the nature of any contractual arrangements between the facilities, and (4) the reasons for the presence of the support activity on the same site as the primary activity.

While the collocated City of Twin Falls Pre-Treatment Facility will be constructed to pre-treat the industrial wastewater discharges from the Agro Farma Facility prior to final treatment at the City of Twin Falls Wastewater Treatment Facility, the presumption of the facility as a support facility does not apply. The City of Twin Falls Pre-Treatment Facility will not bea support facility under EPA interpretation. The only "contract" between the two facilities will be the Industrial Wastewater Discharge Permit (Discharge Permit) issued by the City of Twin Falls to the Agro Farma Facility that will regulate the flow and loadings of the wastewater discharges from the Agro Farma Facility into the City of Twin Falls sewer system.

A Draft Discharge Permit has been issued to Agro Farma, Inc. for their proposed dairy processing facility. The Draft Discharge Permit allows for a reduced (0.22 million gallons per day) industrial and sanitary wastewater discharge flow from the Agro Farma Facility into the City of Twin Falls sewer system until construction and operation of the pre-treatment facility is complete, as well as an additional allowable discharge flow increase upon the completion of the subsequent expansion of the City of Twin Falls Wastewater Treatment Facility. This indicates that not all of the Agro Farma Facility wastewater discharge needs to be discharged to the City of Twin Falls Pre-Treatment Facility to enable the City of Twin Falls Wastewater Treatment Facility to meet its effluent standards.

There is no contract between the Agro Farma Facility and the City of Twin Falls which requires the Agro Farma wastewater discharges be treated by the pre-treatment facility. The City of Twin Falls will have control over how it handles the Agro Farma Facility wastewater it receives and is not required to use the pre-treatment facility if it deems the pre-treatment facility unnecessary. In addition, the City of Twin Falls is not contractually restricted to accepting only wastewater from the Agro Farma Facility and may at any time use the pre-treatment facility to treat other wastewater flows. While the permit will require the Agro Farma Facility notify the City of Twin Falls of any shutdowns, the Agro Farma Facility will not be under any contract to dispose of its wastewater into the City of Twin Falls sewer system and the permit will only outline the requirements that the Agro Farma Facility must meet if it does discharge wastewater to the City Twin Falls sewer system.

Concerning the issue of control, there is no contract between the City of Twin Falls and Agro Farma that allows one facility to control the other facility. The permit will only specify discharge limits for which the Agro Farma Facility industrial and sanitary wastewater must meet prior to discharge to the City of Twin Falls sewer system. Once the Agro Farma Facility discharges its permit compliant wastewater into the City of Twin Falls sewer system, the Agro Farma Facility will have no control how the wastewater is treated downstream nor will be responsible for compliance with end of the pipe discharge effluent standards.

The City of Twin Falls Wastewater Treatment Facility cannot currently handle the increased flow and loading anticipated from the Agro Farma Facility. As such, the City of Twin Falls believes that a pre-treatment facility is needed to ensure that effluent from the City of Twin Falls Wastewater Treatment Facility meets effluent standards with the addition of the Agro Farma wastewater flows. The City of Twin Falls plans to construct the pre-treatment facility at an adjacent/contiguous location to the Agro Farma Facility. The pre-treatment facility will only be used to pre-treat wastewater discharges from the Agro Farma Facility and Agro Farma has land available to lease to the City of Twin Falls. As is the case with many publically owned treatment works (POTWs) that accept industrial and sanitary wastewater, the function of either facility would not change if the facilities were located further apart or on non-adjacent/non-contiguous locations. As such, the pre-treatment facility is not required to

be collocated with the Agro Farma Facility to provide pre-treatment of the Agro Farma Facility wastewater. The City of Twin Falls is only locating the pre-treatment facility at the site for convenience as there is available space.

Based upon the above reasoning, we believe that the City of Twin Falls Pre-Treatment Facility is not a support facility to the Agro Farma Facility and therefore it is not part of the same facility.

2.3 Common Control

The third consideration in determining whether stationary sources should be considered part of a single site is that all sources must be under "common control" of the same person (or persons). In complicated business organizations, "common control" may often only be decided based on the control of day-to-day operations of facilities. The question comes down to whether the two companies and the operations at the two facilities are legally separate.

The Oklahoma Department of Environmental Quality5 and Texas Commission of Environmental Quality[6] have published additional guidance on permitting collocated or adjacent facilities on a case-by-case basis. For the purposes of providing a complete analysis, the test factors have been provided in the following paragraph.

The following general factors are considered by regulatory authorities in determining "common control":

- ownership (i.e., same parent company or a subsidiary of the parent company)
- decision making authority (i.e., does one entity have decision making authority over the operations of the second entity through a contractual agreement or a voting interest)and and day-to-day control of the auxiliary activity by the primary activity
- existence of a contract for service that creates a support/dependency relationship between the two entities

Each of these factors is addressed in detail in the remainder of this section.

1. **Question:** Will there be common ownership between the two facilities? Will the facilities share common workforces, plant managers, security forces, corporate executive offices, and board of directors? Will managers or other workers frequently shuttle back and forth to be involved actively in both facilities? Will the facilities share common payroll activities, employee benefits, health plans, retirement funds, insurance coverage, or other administrative functions?

Common ownership is the primary test to indicate "common control." A rebuttable presumption is assumed when there is a parent-subsidiary relationship or a subsidiary-subsidiary relationship.

The City of Twin Falls Pretreatment Facility is owned by the City of Twin Falls Wastewater Department, a government entity, while the Agro Farma Facility is owned by Agro Farma, a private entity. Thus, common ownership does not exist between these two facilities and neither is a subsidiary to the other. In addition, neither facility will share a common workforce, plant managers, security forces, corporate executive offices, or board of directors with the other facility. Neither managers nor workers will shuttle back and forth or be involved in both facilities on a day-to-day basis. In fact, managers and workers of the Agro Farma Facility personnel will not have access to the City of Twin Falls Pre-Treatment Facility (except in cases where the City of Twin Falls personnel have the right to enter the Afro Farma Facility to determine compliance with the Twin Falls City Sewer Use Regulations and the Industrial Wastewater Discharge Permit) and vice versa. Lastly, Agro Farma and the City of Twin Falls will have separate administrative functions and will not share any common payroll activities, employee benefits, health plans, retirement funds, insurance coverage, or other administrative functions in part or in whole. Therefore, there is no common ownership between the two facilities and the facilities will not be part of the same facility.

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[5] Oklahoma Department of Environmental Quality. 2005. *Air Permitting Collocated Facilities.* July 12.

[6] Texas Commission on Environmental Quality. 2008. *Definition of Site Guidance Document.* www.tceq.state.tx.us/assets/public/permitting/air/Guidance/Title_V/site.pdf. Accessed April 3.

2. **Question:** Will one facility have decision making authority over the other? What are the contractual arrangements for providing goods and services? Is consent of the primary activity required for the auxiliary activity to contract to provide its products/services to a third-party? Can the primary activity assume control of the auxiliary activity under certain circumstances? What does the contract specify with regard to pollution control responsibilities? Will the facilities share equipment, other property, or pollution control equipment? Who will accept the responsibility for compliance with air quality control requirements? What about responsibility for violations of the requirements?

Decision making authority is another common test to indicate "common control." This test determines whether one entity has the authority to make decisions affecting the other entity's operations, equipment, or compliance with regulations.

Agro Farma will lease land to the City of Twin Falls, Idaho for the construction and operation of a wastewater pre-treatment facility. A sewer system will also be constructed to allow for the discharge of industrial and sanitary wastewater from the Agro Farma Facility to the City of Twin Falls Pretreatment Facility and City of Twin Falls Wastewater Treatment Facility. The City of Twin Falls will issue the Agro Farma Facility an Industrial Wastewater Discharge Permit that will regulate the wastewater discharges (industrial and sanitary) from the Agro Farma Facility into the City of Twin Falls sewer system. This Discharge Permit will be the only "contract" between the two facilities. As such, there is no contract between the City of Twin Falls and Agro Farma that restricts the City of Twin Falls from accepting wastewater from other facilities or which restricts the Agro Farma Facility from disposing of its wastewater at another facility other than into the City of Twin Falls sewer system. In addition, there are no contract requirements for the City of Twin Falls to use the pre-treatment facility to handle the Agro Farma wastewater discharges. Thus, there are no requirements that the Agro Farma wastewater discharges be treated by the pre-treatment facility.

Neither facility will have decision making authority over the other facilities operations. Agro Farma will not operate the pre-treatment facility and will be just a customer of the City of Twin Falls for wastewater pre-treatment services. The Pre-Treatment Facility will be owned by the City of Twin Falls, a government entity, and therefore, will not for any reason allow the primary activity, a private company, to assume control of its operations or equipment. In addition, the Draft Discharge Permit states no circumstances under which Agro Farma can assume control of the operation or equipment of the City of Twin Falls Pre-Treatment Facility or vice versa. The permit only allows the City of Twin Falls to order suspension of the Agro Farma Facility wastewater treatment services if it appears to the City of Twin Falls that an actual or threatened discharge presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment or the discharge threatens to interfere with the operation of the POTW or violate any pretreatment limits imposed by the Twin Falls City Sewer Use Regulations. Therefore, neither facility will have control over the other facility at any time.

While the City of Twin Falls Pre-Treatment Facility will be located on land leased from Agro Farma and will thus have equipment and a sewer system at the Agro Farma site, the equipment will not be shared. The equipment installed and operated at the City of Twin Falls Pre-Treatment Facility will be under the complete control of the City of Twin Falls. The proposed boilers, heaters, cooling towers, and anhydrous ammonia system at the Agro Farma Facility will not be shared with the City of Twin Falls Pre-Treatment Facility. In addition, it is not stated anywhere in the permit that either facility will be financially responsible for the equipment of the other facility.

With respect to pollution control responsibilities, the managers at the Agro Farma Facility cannot make decisions that affect pollution control at the City of Twin Falls Pre-Treatment Facility. The Discharge Permit will restrict the Agro Farma Facility wastewater flow and concentrations into the City of Twin Falls sewer system to specified parameters (limits). It requires that the Agro Farma Facility notify the City of Twin Falls of any new wastewater pollutants, changes in manufacturing operations, or any substantial change in the volume or characteristics of the wastewater being introduced to the City of Twin Falls sewer system and to obtain approval from the City of Twin Falls for these changes. The Discharge Permit does not restrict how the Agro Farma Facility meets these conditions. Once the Agro Farma Facility is complaint with wastewater discharge permit limits that enter the City of Twin Falls sewer system, the Agro Farma Facility is no longer responsible for the wastewater discharges,

including control over how the wastewater is treated or compliance with final discharge effluent standards. The two facilities will have separate pollution control responsibilities that will not be shared. Therefore, each party is responsible for pollution control and emissions occurring from their own facility.

Agro Farma will have responsibility for compliance with air quality control requirements for its Agro Farma Facility and will be solely responsible for violations of those requirements. Likewise, the City of Twin Falls will have sole responsibility for compliance with air quality control requirements for its pre-treatment facility and will be solely responsible for violations of those requirements.

In summary, the existence of independent decision making authority of the executives and managers of Agro Farma and City of Twin Falls indicates that "common control" of the two separate facilities will not exist. The responsibility and liability for operations at each site, including pollution control operations, will rest with each respective entity.

Therefore, the two facilities will not be part of the same facility.

3. **Question:** Is the City of Twin Falls Pre-Treatment Facility a contractor-operated unit that supports the Agro Farma Facility?

Justification that the City of Twin Falls Pre-Treatment Facility will not be a support facility, and thus a contractor operated unit that supports the Agro Farma Facility, is provided under the discussion for the criteria of why the two facilities do not belong to the same industrial grouping (refer to Section 2.2-Single Major Industrial Grouping). As the issue is the same, further discussion is not needed in this section.

3 Conclusion

While the above analysis evaluated the facilities with respect to minor source, PSD, and Title V permitting requirements, the facilities are both minor sources and thus PSD and Title V permitting requirements are not applicable to these facilities at this time. Based on this evaluation, we have demonstrated that a combined Agro Farma Facility and the City of Twin Falls Pre-Treatment Facility do not meet the definition of a facility as defined by IDAPA 58.01.01 or a source under 40 Code of Federal Regulations (CFR) 52.2, as it was shown that the facilities do not belong to the same industrial grouping (facilities have different two-digit SIC codes and the City of Twin Falls Pre-Treatment Facility is not a support facility to the Agro Farma Facility) and the two facilities do not meet the "common control" criterion of 40 CFR 70.2. As such, the Agro Farma Facility and the City of Twin Falls Pre-Treatment Facility should be considered to be two separate facilities for the purposes of minor source, PSD, and Title V permitting programs.

Appendix D

Emission Estimates

AgroFarma Twin Falls - Chobani Facility Baseline Emission Estimate Summary

Criteria Pollutants

Criteria Pollutants Emissions Unit Name	Stack ID	PM ton/year	PM_{10}[1] ton/year	$PM_{2.5}$[1] ton/year	NOx ton/year	SO_2 ton/year	CO ton/year	VOC ton/year	Lead ton/year	HAPs ton/year	GHGs - CO2e ton/year
Cleaver Brooks CBLE-700-800 NG Boiler 1	BOILER1	1.45	1.45	1.45	10.16	0.09	5.17	0.57	7.01E-05	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 2	BOILER2	1.45	1.45	1.45	10.16	0.09	5.17	0.57	7.01E-05	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 3	BOILER3	1.45	1.45	1.45	10.16	0.09	5.17	0.57	7.01E-05	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 4	BOILER4	1.45	1.45	1.45	10.16	0.09	5.17	0.57	7.01E-05	2.60E-01	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 5	BOILER5	1.45	1.45	1.45	10.16	0.09	5.17	0.57	7.01E-05	2.60E-01	16,868.25
Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired)	BRMAU 1	0.13	0.13	0.13	1.53	0.01	1.31	0.09	7.71E-06	3.00E-02	1,852.79
Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU)	LABMAU	0.04	0.04	0.04	0.35	2.08E-03	0.31	0.02	1.74E-06	1.00E-02	418.36
Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired)	LABMAU	0.13	0.13	0.13	1.53	0.01	1.31	0.09	7.71E-06	3.00E-02	1,852.79
Main Office RTU 1 - Carrier 48A5,T,030 (indirect fired)	RTU1	0.02	0.02	0.02	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Main Office RTU 2 - Carrier 48A5,T,030 (indirect fired)	RTU2	0.02	0.02	0.02	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Main Office RTU 3 - Carrier 48A5,T,030 (indirect fired)	RTU3	0.02	0.02	0.02	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Main Office RTU 4 - Carrier 48A5,T,030 (indirect fired)	RTU4	0.02	0.02	0.02	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Main Office RTU 5 - Carrier 48A5,T,030 (indirect fired)	RTU5	0.02	0.02	0.02	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Main Office RTU 5 - Carrier 48A5,T,030 (indirect fired)	RTU6	0.04	0.04	0.04	0.22	1.35E-03	0.18	0.01	1.13E-06	4.27E-03	271.31
Meeting/RR/Plant Offices/Maintenance Office RTU - Carrier 48A5,S,020 (indirect fired)	PLANT	0.01	0.01	0.01	0.13	9.02E-04	0.13	0.01	7.53E-07	2.83E-03	180.70
Mantenance/Parts/Fab RTU - Carrier 48A5,S,060 (indirect fired)	MAINT	0.04	0.04	0.04	0.48	3.00E-03	0.44	0.04	2.50E-06	1.00E-02	601.10
Reznor VR-2---60 Receiveing Bay IRH 1	IRH1	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 2	IRH2	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 3	IRH3	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 4	IRH4	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 5	IRH5	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 6	IRH6	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 7	IRH7	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.25
Reznor VR-2---60 Receiveing Bay IRH 8	IRH8	0.01	0.01	0.01	0.09	5.17E-04	0.09	4.73E-03	4.29E-07	1.63E-03	103.21
8 One Cell Cooling Towers	CT01-CT12	3.68	1.10	1.10	--	--	--	--	--	--	--
Anhydrous Ammonia Refrigeration System (8 Chillers)	REFRIG	--	--	--	--	--	--	--	--	--	--
Total		11.50	8.92	8.92	56.86	0.49	31.15	3.20	3.81E-04	1.42	91,701

[1]Assumes $PM_{2.5}$ and PM_{10} emissions are equal to PM emissions.

AgroFarma Twin Falls - Chobani Facility Baseline Emission Estimate Summary

Toxic Air Pollutant Emissions Inventory

Non-Carcinogenic Toxic Air Pollutants (sum of all emissions)	Ammonia	Pentane	Hexane	Naphthalene	Toluene	Cobalt	Manganese	Molybdenum	Selenium	Vanadium	Zinc	Barium	Copper
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Cleaver Brooks Boiler 1	--	8.32E-02	5.76E-02	1.95E-05	1.09E-04	2.69E-06	1.22E-05	3.52E-05	7.68E-07	7.36E-05	9.28E-04	1.41E-04	2.72E-05
Cleaver Brooks Boiler 2	--	8.32E-02	5.76E-02	1.95E-05	1.09E-04	2.69E-06	1.22E-05	3.52E-05	7.68E-07	7.36E-05	9.28E-04	1.41E-04	2.72E-05
Cleaver Brooks Boiler 3	--	8.32E-02	5.76E-02	1.95E-05	1.09E-04	2.69E-06	1.22E-05	3.52E-05	7.68E-07	7.36E-05	9.28E-04	1.41E-04	2.72E-05
Cleaver Brooks Boiler 4	--	8.32E-02	5.76E-02	1.95E-05	1.09E-04	2.69E-06	1.22E-05	3.52E-05	7.68E-07	7.36E-05	9.28E-04	1.41E-04	-2.72E-05
Cleaver Brooks Boiler 5	--	8.32E-02	5.76E-02	1.95E-05	1.09E-04	2.69E-06	1.22E-05	3.52E-05	7.68E-07	7.36E-05	9.28E-04	1.41E-04	2.72E-05
Boiler Room MAU 1	--	9.15E-03	6.34E-03	2.15E-06	1.20E-05	2.96E-07	1.34E-06	3.87E-06	8.45E-08	8.10E-06	1.02E-04	1.55E-05	2.99E-06
Lab MAU	--	2.06E-03	1.43E-03	4.84E-07	2.70E-06	6.67E-08	3.02E-07	8.73E-07	1.91E-08	1.83E-06	2.30E-05	3.49E-06	6.75E-07
Battery MAU	--	9.15E-03	6.34E-03	2.15E-06	1.20E-05	2.96E-07	1.34E-06	3.87E-06	8.45E-08	8.10E-06	1.02E-04	1.55E-05	2.99E-06
Main Office RTU 1	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	4.33E-08	1.96E-07	5.67E-07	1.24E-08	1.18E-06	1.49E-05	2.27E-06	4.38E-07
Main Office RTU 2	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	4.33E-08	1.96E-07	5.67E-07	1.24E-08	1.18E-06	1.49E-05	2.27E-06	4.38E-07
Main Office RTU 3	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	4.33E-08	1.96E-07	5.67E-07	1.24E-08	1.18E-06	1.49E-05	2.27E-06	4.38E-07
Main Office RTU 4	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	4.33E-08	1.96E-07	5.67E-07	1.24E-08	1.18E-06	1.49E-05	2.27E-06	4.38E-07
Main Office RTU 5	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Main Office RTU 6	--	1.34E-03	9.27E-04	3.14E-07	1.75E-06	4.33E-08	1.96E-07	5.67E-07	1.24E-08	1.18E-06	1.49E-05	2.27E-06	4.38E-07
Meeting/RR/Plant Offices/Maintenance Office RTU	--	8.92E-04	6.17E-04	2.09E-07	1.17E-06	2.88E-08	1.30E-07	3.77E-07	8.23E-09	7.89E-07	9.95E-06	1.51E-06	2.92E-07
Maintenance/Parts/Fab RTU	--	8.92E-04	6.17E-04	2.09E-07	1.17E-06	2.88E-08	1.30E-07	3.77E-07	8.23E-09	7.89E-07	9.95E-06	1.51E-06	2.92E-07
Receiving Bay IRH 1	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Receiving Bay IRH 2	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 3	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 4	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 5	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 6	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 7	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Receiving Bay IRH 8	--	5.10E-04	3.53E-04	1.20E-07	6.66E-07	1.65E-08	7.45E-08	2.16E-07	4.70E-09	4.51E-07	5.68E-06	8.62E-07	1.67E-07
Anhydrous Ammonia Refrigeration System (11 Chillers)	2.23	--	--	--	--	--	--	--	--	--	--	--	--
Total Emissions Rate	2.23	0.45	0.31	1.06E-04	5.90E-04	1.45E-05	6.57E-05	1.90E-04	4.14E-06	3.97E-04	5.00E-03	7.60E-04	9.22E-05
IDAPA 58.01.01.585 Screening Emission Level	1.2	1.18E+02	1.20E+01	9.10E-05	2.50E+01	3.30E-03	6.70E-02	3.33E-01	1.30E-02	3.00E-03	3.33E-01	3.30E-02	1.30E-02
Exceeds Screening Level?	**Exceeds**	Below	Below	**Exceeds**	Below	Below	Below	Below	Below	Below	Below	Below	Below

AgroFarma Twin Falls - Chobani Facility Baseline Emission Estimate Summary

Toxic Air Pollutant Emissions Inventory

Carcinogenic Toxic Air Pollutants (sum of all emissions)	Benzene lb/hr	3-Methylchloranthrene lb/hr	Benzo(a)pyrene* lb/hr	Formaldehyde lb/hr	POM (7-PAH)[4] lb/hr	Arsenic lb/hr	Nickel lb/hr	Beryllium lb/hr	Cadmium lb/hr	Chromium lb/hr
Cleaver Brooks Boiler 1	6.72E-05	5.76E-08	3.84E-08	2.40E-03	3.65E-07	6.40E-06	6.72E-05	3.84E-07	3.52E-05	4.48E-05
Cleaver Brooks Boiler 2	6.72E-05	5.76E-08	3.84E-08	2.40E-03	3.65E-07	6.40E-06	6.72E-05	3.84E-07	3.52E-05	4.48E-05
Cleaver Brooks Boiler 3	6.72E-05	5.76E-08	3.84E-08	2.40E-03	3.65E-07	6.40E-06	6.72E-05	3.84E-07	3.52E-05	4.48E-05
Cleaver Brooks Boiler 4	6.72E-05	5.76E-08	3.84E-08	2.40E-03	3.65E-07	6.40E-06	6.72E-05	3.84E-07	3.52E-05	4.48E-05
Cleaver Brooks Boiler 5	6.72E-05	5.76E-08	3.84E-08	2.40E-03	3.65E-07	6.40E-06	6.72E-05	3.84E-07	3.52E-05	4.48E-05
Boiler Room MAU 1	7.39E-06	6.34E-09	4.22E-09	2.64E-04	4.44E-08	7.04E-07	7.39E-06	4.22E-08	3.87E-06	4.93E-06
Lab MAU	1.67E-06	1.43E-09	9.53E-10	5.96E-05	1.00E-08	1.59E-07	1.67E-06	9.53E-09	8.73E-07	1.11E-06
Battery MAU	7.39E-06	6.34E-09	4.22E-09	2.64E-04	4.44E-08	7.04E-07	7.39E-06	4.22E-08	3.87E-06	4.93E-06
Main Office RTU 1	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Main Office RTU 2	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Main Office RTU 3	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Main Office RTU 4	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Main Office RTU 5	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Main Office RTU 6	1.08E-06	9.27E-10	6.18E-10	3.86E-05	6.49E-09	1.03E-07	1.08E-06	6.18E-09	5.67E-07	7.21E-07
Meeting/RR/Plant Offices/Maintenance Office RTU	7.20E-07	6.17E-10	4.12E-10	2.57E-05	4.32E-09	6.86E-08	7.20E-07	4.12E-09	3.77E-07	4.80E-07
Maintenance/Parts/Fab RTU	7.20E-07	6.17E-10	4.12E-10	2.57E-05	4.32E-09	6.86E-08	7.20E-07	4.12E-09	3.77E-07	4.80E-07
Receiving Bay IRH 1	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 2	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 3	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 4	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 5	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 6	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 7	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Receiving Bay IRH 8	4.12E-07	3.53E-10	2.35E-10	1.47E-05	2.47E-09	3.92E-08	4.12E-07	2.35E-09	2.16E-07	2.74E-07
Ammonia Refrigeratioin	--	--	--	--	--	--	--	--	--	--
Total Emissions Rate	**3.64E-04**	**3.12E-07**	**2.08E-07**	**1.30E-02**	**1.99E-06**	**3.46E-05**	**3.64E-04**	**2.08E-06**	**1.90E-04**	**2.42E-04**
Carcinogenic Screening Emission Level 58.01.01.586	8.00E-04	2.50E-06	2.00E-06	5.10E-04	2.00E-06	1.50E-06	2.75E-05	2.80E-05	3.70E-06	3.30E-02
Exceeds Screening Level?	Below	Below	Below	**Exceed**	Below	**Exceed**	**Exceed**	Below	**Exceed**	Below

AgroFarma Twin Falls - Chobani Facilty Emission Estimates

MAUs (NG)

Annual Operation 8,760 hours/year

Criteria Pollutant	Emission Factor[1]	Unit	Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired) Input MMBTU/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU) Input MMBTU/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired) Input MMBTU/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)
Total Particulate Matter (PM)	7.6	lb/10^6SCF	3.587	0.03	0.13	0.810	0.01	0.04	3.587	0.03	0.13
Nitrogen Oxides (NOx)	100	lb/10^6SCF	3.587	0.35	1.53	0.810	0.08	0.35	3.587	0.35	1.53
Sulfur Dioxide (SO_2)	0.6	lb/10^6SCF	3.587	2.11E-03	9.24E-03	0.810	4.76E-04	2.08E-03	3.587	2.11E-03	9.24E-03
Carbon Monoxide (CO)	84	lb/10^6SCF	3.587	0.30	1.31	0.810	0.07	0.31	3.587	0.30	1.31
VOC	5.5	lb/10^6SCF	3.587	0.02	0.09	0.810	4.37E-03	1.91E-02	3.587	0.02	0.09
Lead	5.00E-04	lb/10^6SCF	3.587	1.76E-06	7.71E-06	0.810	3.97E-07	1.74E-06	3.587	1.76E-06	7.71E-06

Toxic Air Pollutants Non-metals [2]	CAS No.	CAA 112(b) HAP	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL
Pentane	109-66-0	No	2.60E+00	3.52E-03	9.15E-03	4.01E-02	1.18E+02	Below	7.94E-04	2.06E-03	9.02E-03	1.18E+02	Below	3.52E-03	9.15E-03	4.01E-02	1.18E+02	Below
Benzene	71-43-2	Yes	2.10E-03	3.52E-03	7.39E-06	3.24E-05	8.00E-04	Below	7.94E-04	1.67E-06	7.31E-06	8.00E-04	Below	3.52E-03	7.39E-06	3.24E-05	8.00E-04	Below
3-Methylchloranthrene	56-49-5	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08	2.50E-06	Below	7.94E-04	1.43E-09	6.26E-09	2.50E-06	Below	3.52E-03	6.34E-09	2.78E-08	2.50E-06	Below
Benzo(a)pyrene*	50-32-8	Yes	1.20E-06	3.52E-03	4.22E-09	1.85E-08	2.00E-06	Below	7.94E-04	9.53E-10	4.17E-09	2.00E-06	Below	3.52E-03	4.22E-09	1.85E-08	2.00E-06	Below
Formaldehyde	50-00-0	Yes	7.50E-02	3.52E-03	2.64E-04	1.16E-03	5.10E-04	Below	7.94E-04	5.96E-05	2.61E-04	5.10E-04	Below	3.52E-03	2.64E-04	1.16E-03	5.10E-04	Below
POM (7-PAH)[3]		Yes		3.52E-03	4.44E-08	1.95E-07	2.00E-06	Below	7.94E-04	1.00E-08	4.38E-08	2.00E-06	Below	3.52E-03	4.44E-08	1.95E-07	2.00E-06	Below
Hexane	110-54-3	Yes	1.80E+00	3.52E-03	6.34E-03	2.78E-02	1.20E+01	Below	7.94E-04	1.43E-03	6.26E-03	1.20E+01	Below	3.52E-03	6.34E-03	2.78E-02	1.20E+01	Below
Naphthalene	91-20-3	Yes	6.10E-04	3.52E-03	2.15E-06	9.42E-06	9.10E-05	Below	7.94E-04	4.84E-07	2.12E-06	9.10E-05	Below	3.52E-03	2.15E-06	9.42E-06	9.10E-05	Below
Toluene	108-88-3	Yes	3.40E-03	3.52E-03	1.20E-05	5.26E-05	2.50E+01	Below	7.94E-04	2.70E-06	1.18E-05	2.50E+01	Below	3.52E-03	1.20E-05	5.26E-05	2.50E+01	Below
2-Methylnapthalene	97-57-6	Yes	2.40E-05	3.52E-03	8.45E-08	3.70E-07			7.94E-04	1.91E-08	8.37E-08			3.52E-03	8.45E-08	3.70E-07		
7, 12 - Dimethylbenz(a)anthracene		Yes	1.60E-05	3.52E-03	5.63E-08	2.47E-07			7.94E-04	1.27E-08	5.56E-08			3.52E-03	5.63E-08	2.47E-07		
Acenaphthene	83-32-9	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Acenaphyhylene	203-96-8	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Anthracene	120-12-7	Yes	2.40E-06	3.52E-03	8.45E-09	3.70E-08			7.94E-04	1.91E-09	8.37E-09			3.52E-03	8.45E-09	3.70E-08		
Dichlorobenzene	25321-22-6	Yes	1.20E-03	3.52E-03	4.22E-06	1.85E-05			7.94E-04	9.53E-07	4.17E-06			3.52E-03	4.22E-06	1.85E-05		
Flouranthene	206-44-0	Yes	3.00E-06	3.52E-03	1.06E-08	4.64E-08			7.94E-04	2.38E-09	1.04E-08			3.52E-03	1.06E-08	4.64E-08		
Fluorene	86-73-7	Yes	2.80E-06	3.52E-03	9.86E-09	4.32E-08			7.94E-04	2.22E-09	9.72E-09			3.52E-03	9.86E-09	4.32E-08		
Phenanthrene	85-01-8	Yes	1.70E-05	3.52E-03	5.98E-08	2.62E-07			7.94E-04	1.35E-08	5.91E-08			3.52E-03	5.98E-08	2.62E-07		
Benzo(a)anthracene*	56-55-3	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Benzo(b)fluoranthene*	205-82-3	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Benzo(g,h,i)perylene	191-24-2	Yes	1.20E-06	3.52E-03	4.22E-09	1.85E-08			7.94E-04	9.53E-10	4.17E-09			3.52E-03	4.22E-09	1.85E-08		
Benzo(k)fluoranthene*	205-82-3	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Chrysene*	218-01-9	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		
Dibenzo(a,h)anthracene*	53-70-3	Yes	1.20E-06	3.52E-03	4.22E-09	1.85E-08			7.94E-04	9.53E-10	4.17E-09			3.52E-03	4.22E-09	1.85E-08		
Indeno(1,2,3-cd)pyrene*	193-39-5	Yes	1.80E-06	3.52E-03	6.34E-09	2.78E-08			7.94E-04	1.43E-09	6.26E-09			3.52E-03	6.34E-09	2.78E-08		

Toxic Air Pollutants Metals [4]	CAS Number	CAA 112(b) HAP	Emission Factor (lb/10^6 scf)	Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL
Mercury	7439-97-6	Yes	2.60E-04	3.52E-03	9.15E-07	4.01E-06			7.94E-04	2.06E-07	9.02E-07			3.52E-03	9.15E-07	4.01E-06		
Arsenic	7440-38-2	Yes	2.00E-04	3.52E-03	7.04E-07	3.08E-06	1.50E-06	Below	7.94E-04	1.59E-07	6.96E-07	1.50E-06	Below	3.52E-03	7.04E-07	3.08E-06	1.50E-06	Below
Nickel	7440-02-0	Yes	2.10E-03	3.52E-03	7.39E-06	3.24E-05	2.75E-05	Below	7.94E-04	1.67E-06	7.31E-06	2.75E-05	Below	3.52E-03	7.39E-06	3.24E-05	2.75E-05	Below
Beryllium	7440-41-7	Yes	1.20E-05	3.52E-03	4.22E-08	1.85E-07	2.80E-05	Below	7.94E-04	9.53E-09	4.17E-08	2.80E-05	Below	3.52E-03	4.22E-08	1.85E-07	2.80E-05	Below
Cadmium	7440-43-9	Yes	1.10E-03	3.52E-03	3.87E-06	1.70E-05	3.70E-06	Exceeds	7.94E-04	8.73E-07	3.82E-06	3.70E-06	Below	3.52E-03	3.87E-06	1.70E-05	3.70E-06	Exceeds
Chromium	7440-47-3	Yes	1.40E-03	3.52E-03	4.93E-06	2.16E-05	3.30E-02	Below	7.94E-04	1.11E-06	4.86E-06	3.30E-02	Below	3.52E-03	4.93E-06	2.16E-05	3.30E-02	Below
Cobalt	7440-48-4	Yes	8.40E-05	3.52E-03	2.96E-07	1.30E-06	3.30E-03	Below	7.94E-04	6.67E-08	2.92E-07	3.30E-03	Below	3.52E-03	2.96E-07	1.30E-06	3.30E-03	Below
Manganese	7439-96-5	Yes	3.80E-04	3.52E-03	1.34E-06	5.87E-06	6.70E-02	Below	7.94E-04	3.02E-07	1.32E-06	6.70E-02	Below	3.52E-03	1.34E-06	5.87E-06	6.70E-02	Below
Molybdenum	7439-98-7	Yes	1.10E-03	3.52E-03	3.87E-06	1.70E-05	3.33E-01	Below	7.94E-04	8.73E-07	3.82E-06	3.33E-01	Below	3.52E-03	3.87E-06	1.70E-05	3.33E-01	Below
Selenium	7782-49-2	Yes	2.40E-05	3.52E-03	8.45E-08	3.70E-07	1.30E-02	Below	7.94E-04	1.91E-08	8.37E-08	1.30E-02	Below	3.52E-03	8.45E-08	3.70E-07	1.30E-02	Below
Vanadium	1314-62-1	No	2.30E-03	3.52E-03	8.10E-06	3.55E-05	3.00E-03	Below	7.94E-04	1.83E-06	8.02E-06	3.00E-03	Below	3.52E-03	8.10E-06	3.55E-05	3.00E-03	Below
Zinc	7440-66-6	No	2.90E-02	3.52E-03	1.02E-04	4.47E-04	3.33E-01	Below	7.94E-04	2.30E-05	1.01E-04	3.33E-01	Below	3.52E-03	1.02E-04	4.47E-04	3.33E-01	Below
Barium	7440-39-3	No	4.40E-03	3.52E-03	1.55E-05	6.79E-05	3.30E-02	Below	7.94E-04	3.49E-06	1.53E-05	3.30E-02	Below	3.52E-03	1.55E-05	6.79E-05	3.30E-02	Below
Copper	7440-50-8	No	8.50E-04	3.52E-03	2.99E-06	1.31E-05	1.30E-02	Below	7.94E-04	6.75E-07	2.96E-06	1.30E-02	Below	3.52E-03	2.99E-06	1.31E-05	1.30E-02	Below
			Total Non-Metal HAPs		6.63E-03	2.91E-02			**Total Non-Metal HAPs**	1.50E-03	6.55E-03			**Total Non-Metal HAPs**	6.63E-03	2.91E-02		
			Total Metal HAPs		2.34E-05	1.03E-04			**Total Metal HAPs**	5.29E-06	2.31E-05			**Total Metal HAPs**	2.34E-05	1.03E-04		
			Total HAPs		0.01	0.03			**Total HAPs**	1.51E-03	0.01			**Total HAPs**	0.01	0.03		

Notes:

[1] Criteria Pollutant emission factors for small uncontrolled boilers as stated AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-1 and 1.4-2. PM emission factor is assumed to equal PM10.
Conversion Factor: 1020 BTU/SCF

[2] Toxic Air Pollutants emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3.

[3] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[4] Toxic Air Pollutant Metal emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4.

AgroFarma Twin Falls - Chobani Facilty Emission Estimates
MAUs (NG)
Annual Operation 8,760 hours/year

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C Equation C-1 Tier 1	3,517	30,808,920	1679.23	794	6,955,440	379.10	3,517	30,808,920	1679.23
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	3,517	30,808,920	3.17E-03	794	6,955,440	7.15E-04	3,517	30,808,920	3.17E-03
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	3,517	30,808,920	0.03	794	6,955,440	0.01	3,517	30,808,920	0.03
CO2e			40 CFR 98 Part A			1,680.84			379.53			1,680.84

Notes
[5]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[6]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)
Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Faciltiy Emission Estimate

IRHs (NG)

Annual Operation 8,760 hours/year

Emission Unit	Input MMBTU/hr
Reznor VR-2---60 Receiveing Bay IRH 1	0.200
Reznor VR-2---60 Receiveing Bay IRH 2	0.200
Reznor VR-2---60 Receiveing Bay IRH 3	0.200
Reznor VR-2---60 Receiveing Bay IRH 4	0.200
Reznor VR-2---60 Receiveing Bay IRH 5	0.200
Reznor VR-2---60 Receiveing Bay IRH 6	0.200
Reznor VR-2---60 Receiveing Bay IRH 7	0.200
Reznor VR-2---60 Receiveing Bay IRH 8	0.200

		Reznor VR-2---60 Receiveing Bay IRH 1		Reznor VR-2---60 Receiveing Bay IRH 2		Reznor VR-2---60 Receiveing Bay IRH 3		Reznor VR-2---60 Receiveing Bay IRH 4		Reznor VR-2---60 Receiveing Bay IRH 5		Reznor VR-2---60 Receiveing Bay IRH 6		Reznor VR-2---60 Receiveing Bay IRH 7		Reznor VR-2---60 Receiveing Bay IRH 8	
Criteria Pollutant	**Emission Factor[1]**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**	**Emission Rate**
	lb/10^6SCF	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Total Particulate Matter (PM)	7.6	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01	1.49E-03	0.01
Nitrogen Oxides (NOx)	100	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09
Sulfur Dioxide (SO_2)	0.6	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04	1.18E-04	5.17E-04
Carbon Monoxide (CO)	84	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09
VOC	5.5	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03	1.08E-03	4.73E-03
Lead	5.00E-04	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07	9.80E-08	4.29E-07

AgroFarma Twin Falls - Chobani Faciltiy Emission Estimate

IRHs (NG)

Annual Operation 8,760 hours/year

Toxic Air Pollutants Non-metals [2]	CAS No.	CAA 112(b) HAP	EPA AP-42 Natural Gas Emission Factor ($lb/10^6$ scf)	Reznor VR-2---60 Receiveing Bay IRH 1 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 2 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 3 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL
Pentane	109-66-0	No	2.60E+00	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below
Benzene	71-43-2	Yes	2.10E-03	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below
3-Methylchloranthrene	56-49-5	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below
Benzo(a)pyrene*	50-32-8	Yes	1.20E-06	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below
Formaldehyde	50-00-0	Yes	7.50E-02	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below
POM (7-PAH)[3]		Yes		1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below	1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below	1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below
Hexane	110-54-3	Yes	1.80E+00	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below
Naphthalene	91-20-3	Yes	6.10E-04	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below
Toluene	108-88-3	Yes	3.40E-03	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below
2-Methylnapthalene	97-57-6	Yes	2.40E-05	1.96E-04	4.70E-09	2.06E-08			1.96E-04	4.70E-09	2.06E-08			1.96E-04	4.70E-09	2.06E-08		
7, 12 - Dimethylbenz(a)anthracene		Yes	1.60E-05	1.96E-04	3.14E-09	1.38E-08			1.96E-04	3.14E-09	1.38E-08			1.96E-04	3.14E-09	1.38E-08		
Acenaphthene	83-32-9	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Acenaphyhylene	203-96-8	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Anthracene	120-12-7	Yes	2.40E-06	1.96E-04	4.70E-10	2.06E-09			1.96E-04	4.70E-10	2.06E-09			1.96E-04	4.70E-10	2.06E-09		
Dichlorobenzene	25321-22-6	Yes	1.20E-03	1.96E-04	2.35E-07	1.03E-06			1.96E-04	2.35E-07	1.03E-06			1.96E-04	2.35E-07	1.03E-06		
Flouranthene	206-44-0	Yes	3.00E-06	1.96E-04	5.88E-10	2.58E-09			1.96E-04	5.88E-10	2.58E-09			1.96E-04	5.88E-10	2.58E-09		
Fluorene	86-73-7	Yes	2.80E-06	1.96E-04	5.49E-10	2.40E-09			1.96E-04	5.49E-10	2.40E-09			1.96E-04	5.49E-10	2.40E-09		
Phenanthrene	85-01-8	Yes	1.70E-05	1.96E-04	3.33E-09	1.46E-08			1.96E-04	3.33E-09	1.46E-08			1.96E-04	3.33E-09	1.46E-08		
Benzo(a)anthracene*	56-55-3	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(b)fluoranthene*	205-82-3	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(g,h,i)perylene	191-24-2	Yes	1.20E-06	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Benzo(k)fluoranthene*	205-82-3	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Chrysene*	218-01-9	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Dibenzo(a,h)anthracene*	53-70-3	Yes	1.20E-06	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Indeno(1,2,3-cd)pyrene*	193-39-5	Yes	1.80E-06	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		

Toxic Air Pollutants Metals [4]	CAS Number	CAA 112(b) HAP	Emission Factor ($lb/10^6$ scf)	Reznor VR-2---60 Receiveing Bay IRH 1 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 2 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 3 Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL
Mercury	7439-97-6	Yes	2.60E-04	1.96E-04	5.10E-08	2.23E-07			1.96E-04	5.10E-08	2.23E-07			1.96E-04	5.10E-08	2.23E-07		
Arsenic	7440-38-2	Yes	2.00E-04	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below
Nickel	7440-02-0	Yes	2.10E-03	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below
Beryllium	7440-41-7	Yes	1.20E-05	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below
Cadmium	7440-43-9	Yes	1.10E-03	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below
Chromium	7440-47-3	Yes	1.40E-03	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below
Cobalt	7440-48-4	Yes	8.40E-05	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below
Manganese	7439-96-5	Yes	3.80E-04	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below
Molybdenum	7439-98-7	Yes	1.10E-03	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below
Selenium	7782-49-2	Yes	2.40E-05	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below
Vanadium	1314-62-1	No	2.30E-03	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below
Zinc	7440-66-6	No	2.90E-02	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below
Barium	7440-39-3	No	4.40E-03	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below
Copper	7440-50-8	No	8.50E-04	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below
			Total Non-Metal HAPs		3.69E-04	1.62E-03			**Total Non-Metal HAPs**	3.69E-04	1.62E-03			**Total Non-M**	3.69E-04	1.62E-03		**Total**
			Total Metal HAPs		1.31E-06	5.72E-06			**Total Metal HAPs**	1.31E-06	5.72E-06			**Total Metal**	1.31E-06	5.72E-06		**T**
			Total HAPs		3.70E-04	1.63E-03			**Total HAPs**	3.70E-04	1.63E-03			**Total HAPs**	3.70E-04	1.63E-03		

Notes:

[1] Criteria Pollutant emission factors for small uncontrolled boilers as stated AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-1 and 1.4-2. PM emission factor is assumed to equal PM10.
Conversion Factor: 1020 BTU/SCF

[2] Toxic Air Pollutants emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3.

[3] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[4] Toxic Air Pollutant Metal emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4.

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Toxic Air Pollutants Non-metals [2]	CAS No.	Reznor VR-2---60 Receiveing Bay IRH 4 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 5 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)	
Pentane	109-66-0	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below
Benzene	71-43-2	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below
3-Methylchloranthrene	56-49-5	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below
Benzo(a)pyrene*	50-32-8	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below
Formaldehyde	50-00-0	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below
POM (7-PAH)[3]		1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below	1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below
Hexane	110-54-3	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below
Naphthalene	91-20-3	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below
Toluene	108-88-3	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below
2-Methylnapthalene	97-57-6	1.96E-04	4.70E-09	2.06E-08			1.96E-04	4.70E-09	2.06E-08		
7, 12 - Dimethylbenz(a)anthracene		1.96E-04	3.14E-09	1.38E-08			1.96E-04	3.14E-09	1.38E-08		
Acenaphthene	83-32-9	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Acenaphyhylene	203-96-8	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Anthracene	120-12-7	1.96E-04	4.70E-10	2.06E-09			1.96E-04	4.70E-10	2.06E-09		
Dichlorobenzene	25321-22-6	1.96E-04	2.35E-07	1.03E-06			1.96E-04	2.35E-07	1.03E-06		
Flouranthene	206-44-0	1.96E-04	5.88E-10	2.58E-09			1.96E-04	5.88E-10	2.58E-09		
Fluorene	86-73-7	1.96E-04	5.49E-10	2.40E-09			1.96E-04	5.49E-10	2.40E-09		
Phenanthrene	85-01-8	1.96E-04	3.33E-09	1.46E-08			1.96E-04	3.33E-09	1.46E-08		
Benzo(a)anthracene*	56-55-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(b)fluoranthene*	205-82-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(g,h,i)perylene	191-24-2	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Benzo(k)fluoranthene*	205-82-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Chrysene*	218-01-9	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Dibenzo(a,h)anthracene*	53-70-3	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Indeno(1,2,3-cd)pyrene*	193-39-5	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		

Toxic Air Pollutants Metals [4]	CAS Number	Reznor VR-2---60 Receiveing Bay IRH 4 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 5 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)	
Mercury	7439-97-6	1.96E-04	5.10E-08	2.23E-07			1.96E-04	5.10E-08	2.23E-07		
Arsenic	7440-38-2	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below
Nickel	7440-02-0	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below
Beryllium	7440-41-7	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below
Cadmium	7440-43-9	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below
Chromium	7440-47-3	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below
Cobalt	7440-48-4	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below
Manganese	7439-96-5	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below
Molybdenum	7439-98-7	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below
Selenium	7782-49-2	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below
Vanadium	1314-62-1	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below
Zinc	7440-66-6	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below
Barium	7440-39-3	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below
Copper	7440-50-8	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below
		Non-Metal HAPs	3.69E-04	1.62E-03			**Total Non-Metal HAPs**	3.69E-04	1.62E-03		Tot
		otal Metal HAPs	1.31E-06	5.72E-06			**Total Metal HAPs**	1.31E-06	5.72E-06		
		Total HAPs	3.70E-04	1.63E-03			**Total HAPs**	3.70E-04	1.63E-03		

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Toxic Air Pollutants Non-metals [2]	CAS No.	Reznor VR-2---60 Receiveing Bay IRH 6 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 7 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 8 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/yr)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)	
Pentane	109-66-0	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below	1.96E-04	5.10E-04	2.23E-03	1.18E+02	Below
Benzene	71-43-2	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below	1.96E-04	4.12E-07	1.80E-06	8.00E-04	Below
3-Methylchloranthrene	56-49-5	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below	1.96E-04	3.53E-10	1.55E-09	2.50E-06	Below
Benzo(a)pyrene*	50-32-8	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below	1.96E-04	2.35E-10	1.03E-09	2.00E-06	Below
Formaldehyde	50-00-0	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below	1.96E-04	1.47E-05	6.44E-05	5.10E-04	Below
POM (7-PAH)[3]		1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below	1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below	1.96E-04	2.47E-09	1.08E-08	2.00E-06	Below
Hexane	110-54-3	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below	1.96E-04	3.53E-04	1.55E-03	1.20E+01	Below
Naphthalene	91-20-3	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below	1.96E-04	1.20E-07	5.26E-07	9.10E-05	Below
Toluene	108-88-3	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below	1.96E-04	6.66E-07	2.92E-06	2.50E+01	Below
2-Methylnapthalene	97-57-6	1.96E-04	4.70E-09	2.06E-08			1.96E-04	4.70E-09	2.06E-08			1.96E-04	4.70E-09	2.06E-08		
7, 12 - Dimethylbenz(a)anthracene		1.96E-04	3.14E-09	1.38E-08			1.96E-04	3.14E-09	1.38E-08			1.96E-04	3.14E-09	1.38E-08		
Acenaphthene	83-32-9	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Acenaphyhylene	203-96-8	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Anthracene	120-12-7	1.96E-04	4.70E-10	2.06E-09			1.96E-04	4.70E-10	2.06E-09			1.96E-04	4.70E-10	2.06E-09		
Dichlorobenzene	25321-22-6	1.96E-04	2.35E-07	1.03E-06			1.96E-04	2.35E-07	1.03E-06			1.96E-04	2.35E-07	1.03E-06		
Flouranthene	206-44-0	1.96E-04	5.88E-10	2.58E-09			1.96E-04	5.88E-10	2.58E-09			1.96E-04	5.88E-10	2.58E-09		
Fluorene	86-73-7	1.96E-04	5.49E-10	2.40E-09			1.96E-04	5.49E-10	2.40E-09			1.96E-04	5.49E-10	2.40E-09		
Phenanthrene	85-01-8	1.96E-04	3.33E-09	1.46E-08			1.96E-04	3.33E-09	1.46E-08			1.96E-04	3.33E-09	1.46E-08		
Benzo(a)anthracene*	56-55-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(b)fluoranthene*	205-82-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Benzo(g,h,i)perylene	191-24-2	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Benzo(k)fluoranthene*	205-82-3	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Chrysene*	218-01-9	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		
Dibenzo(a,h)anthracene*	53-70-3	1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09			1.96E-04	2.35E-10	1.03E-09		
Indeno(1,2,3-cd)pyrene*	193-39-5	1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09			1.96E-04	3.53E-10	1.55E-09		

Toxic Air Pollutants Metals [4]	CAS Number	Reznor VR-2---60 Receiveing Bay IRH 6 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 7 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Reznor VR-2---60 Receiveing Bay IRH 8 Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/yr)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)	
Mercury	7439-97-6	1.96E-04	5.10E-08	2.23E-07			1.96E-04	5.10E-08	2.23E-07			1.96E-04	5.10E-08	2.23E-07		
Arsenic	7440-38-2	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below	1.96E-04	3.92E-08	1.72E-07	1.50E-06	Below
Nickel	7440-02-0	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below	1.96E-04	4.12E-07	1.80E-06	2.75E-05	Below
Beryllium	7440-41-7	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below	1.96E-04	2.35E-09	1.03E-08	2.80E-05	Below
Cadmium	7440-43-9	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below	1.96E-04	2.16E-07	9.46E-07	3.70E-06	Below
Chromium	7440-47-3	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below	1.96E-04	2.74E-07	1.20E-06	3.30E-02	Below
Cobalt	7440-48-4	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below	1.96E-04	1.65E-08	7.23E-08	3.30E-03	Below
Manganese	7439-96-5	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below	1.96E-04	7.45E-08	3.26E-07	6.70E-02	Below
Molybdenum	7439-98-7	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below	1.96E-04	2.16E-07	9.46E-07	3.33E-01	Below
Selenium	7782-49-2	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below	1.96E-04	4.70E-09	2.06E-08	1.30E-02	Below
Vanadium	1314-62-1	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below	1.96E-04	4.51E-07	1.98E-06	3.00E-03	Below
Zinc	7440-66-6	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below	1.96E-04	5.68E-06	2.49E-05	3.33E-01	Below
Barium	7440-39-3	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below	1.96E-04	8.62E-07	3.78E-06	3.30E-02	Below
Copper	7440-50-8	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below	1.96E-04	1.67E-07	7.31E-07	1.30E-02	Below
		al Non-Metal HAPs	3.69E-04	1.62E-03			**Total Non-Metal HAPs**	3.69E-04	1.62E-03			**Total Non-Metal HAPs**	3.69E-04	1.62E-03		
		Total Metal HAPs	1.31E-06	5.72E-06			**Total Metal HAPs**	1.31E-06	5.72E-06			**Total Metal HAPs**	1.31E-06	5.72E-06		
		Total HAPs	3.70E-04	1.63E-03			**Total HAPs**	3.70E-04	1.63E-03			**Total HAPs**	3.70E-04	1.63E-03		

AgroFarma Twin Falls - Chobani Faciltiy Emission Estimate
IRHs (NG)
Annual Operation 8,760 hours/year

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Reznor VR-2---60 Receiveing Bay IRH 1 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Reznor VR-2---60 Receiveing Bay IRH 2 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Reznor VR-2---60 Receiveing Bay IRH 3 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Reznor VR-2---60 Receiveing Bay IRH 4 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr	Reznor VR-2---60 Receiveing Bay IRH 5 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] metric ton/yr
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C Equation C-1 Tier 1	196	1,716,960	93.58	196	1,716,960	93.58	196	1,716,960	93.58	196	1,716,960	93.58	196	1,716,960	93.58
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	196	1,716,960	1.77E-03	196	1,716,960	1.77E-03	196	1,716,960	1.77E-03	196	1,716,960	1.77E-03	196	1,716,960	1.77E-03
CO2e			40 CFR 98 Part A			93.67			93.67			93.67			93.67			93.67

Notes
[5]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons
[6]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons
[7]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)
Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Faci
IRHs (NG)
Annual Operation 8,760

Green House Gases	EF (Natural Gas) kg/MMBtu	Reznor VR-2---60 Receiveing Bay IRH 6 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Reznor VR-2---60 Receiveing Bay IRH 7 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Reznor VR-2---60 Receiveing Bay IRH 8 Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)
CO_2	53.02	196	1,716,960	93.58	196	1,716,960	93.58	196	1,716,960	93.58
N_2O	1.0E-04	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04	196	1,716,960	1.77E-04
CH_4	1.0E-03	196	1,716,960	1.77E-03	196	1,716,960	1.77E-03	196	1,716,960	0.00
CO2e				93.67			93.67			93.63

Notes
[5]Eqn C-1: CO_2 = 1 x
Fuel = Volume of f
EF = Fuel-specific
HHV = Default higl
1 x 10^{-3} = Convers
[6]Eqn C-8: CH_4 or N_2
Fuel = Volume of f
EF = Fuel-specific
HHV = Default higl
1 x 10^{-3} = Convers
[7]CO_2e = (GWP CO_2
Global Warming P
GWP CO_2 =
GWP CH_4 =
GWP N_2O =

AgroFarma Twin Falls - Chobani Faciltiy Emissions Estimate

RTUs (NG)

Annual Operation 8,760 hours/year

Emission Unit	Input (MMBTU/hr)
Main Office RTU 1 Carrier 48A5,T,030 (indirect fired)	0.525
Main Office RTU 2 Carrier 48A5,T,030 (indirect fired)	0.525
Main Office RTU 3 Carrier 48A5,T,030 (indirect fired)	0.525
Main Office RTU 4 Carrier 48A5,T,030 (indirect fired)	0.525
Main Office RTU 5 Carrier 48A5,T,030 (indirect fired)	0.525
Main Office RTU 6 Carrier 48A5,T,030 (indirect fired)	0.525
Meeting/RR/Plant Offices/Maintenance Office RTU Carrier 48A5,S,020 (indirect fired RTU)	0.350
Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired)	1.164

		Main Office RTU 1 Carrier 48A5,T,030 (indirect fired)		Main Office RTU 2 Carrier 48A5,T,030 (indirect fired)		Main Office RTU 3 Carrier 48A5,T,030 (indirect fired)		Main Office RTU 4 Carrier 48A5,T,030 (indirect fired)		Main Office RTU 5 Carrier 48A5,T,030 (indirect fired)		Main Office RTU 6 Carrier 48A5,T,030 (indirect fired)		Meeting/RR/Plant Offices/Maint Office RTU Carrier 48A5,S,020 (indirect fired)		Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired)	
Criteria Pollutant	**Emission Factor[1] lb/10^6SCF**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**	**Emission Rate (lb/hr)**	**Emission Rate (ton/yr)**
Total Particulate Matter (PM)	7.6	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	3.91E-03	0.02	2.61E-03	0.01	0.01	0.04
Nitrogen Oxides (NOx)	100	0.05	0.22	0.05	0.22	0.05	0.22	0.05	0.22	0.05	0.22	0.05	0.22	0.03	0.13	0.11	0.48
Sulfur Dioxide (SO_2)	0.6	3.09E-04	1.35E-03	3.09E-04	1.35E-03	3.09E-04	1.35E-03	3.09E-04	1.35E-03	3.09E-04	1.35E-03	3.09E-04	1.35E-03	2.06E-04	9.02E-04	6.85E-04	3.00E-03
Carbon Monoxide (CO)	84	0.04	0.18	0.04	0.18	0.04	0.18	0.04	0.18	0.04	0.18	0.04	0.18	0.03	0.13	0.10	0.44
VOC	5.5	2.83E-03	0.01	2.83E-03	0.01	2.83E-03	1.24E-02	2.83E-03	0.01	2.83E-03	0.01	2.83E-03	0.01	1.89E-03	8.28E-03	0.01	0.04
Lead	5.00E-04	2.57E-07	1.13E-06	2.57E-07	1.13E-06	2.57E-07	1.13E-06	2.57E-07	1.13E-06	2.57E-07	1.13E-06	2.57E-07	1.13E-06	1.72E-07	7.53E-07	5.71E-07	2.50E-06

AgroFarma Twin Falls - Chobani Faciltiy Emissions Estimate
RTUs (NG)
Annual Operation 8,760 hours/year

Toxic Air Pollutants Non-metals [2]	CAS No.	CAA 112(b) HAP	EPA AP-42 Natural Gas Emission Factor	Main Office RTU 1 Carrier 48A5,T,030 (indirect fired)					Main Office RTU 2 Carrier 48A5,T,030 (indirect fired)					Main Office RTU 3 Carrier 48A5,T,030 (indirect fired)				
				Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
			(lb/10^6 scf)	10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/yr)	(lb/hr)	
Pentane	109-66-0	No	2.60E+00	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below
Benzene	71-43-2	Yes	2.10E-03	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below
3-Methylchloranthrene	56-49-5	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below
Benzo(a)pyrene*	50-32-8	Yes	1.20E-06	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below
Formaldehyde	50-00-0	Yes	7.50E-02	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below
POM (7-PAH)[3]		Yes		5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below	5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below	5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below
Hexane	110-54-3	Yes	1.80E+00	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below
Naphthalene	91-20-3	Yes	6.10E-04	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below
Toluene	108-88-3	Yes	3.40E-03	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below
2-Methylnapthalene	97-57-6	Yes	2.40E-05	5.15E-04	1.24E-08	5.43E-08			5.15E-04	1.24E-08	5.43E-08			5.15E-04	1.24E-08	5.43E-08		
7, 12 - Dimethylbenz(a)anthracene		Yes	1.60E-05	5.15E-04	8.24E-09	3.61E-08			5.15E-04	8.24E-09	3.61E-08			5.15E-04	8.24E-09	3.61E-08		
Acenaphthene	83-32-9	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Acenaphyhylene	203-96-8	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Anthracene	120-12-7	Yes	2.40E-06	5.15E-04	1.24E-09	5.43E-09			5.15E-04	1.24E-09	5.43E-09			5.15E-04	1.24E-09	5.43E-09		
Dichlorobenzene	25321-22-6	Yes	1.20E-03	5.15E-04	6.18E-07	2.71E-06			5.15E-04	6.18E-07	2.71E-06			5.15E-04	6.18E-07	2.71E-06		
Flouranthene	206-44-0	Yes	3.00E-06	5.15E-04	1.55E-09	6.79E-09			5.15E-04	1.55E-09	6.79E-09			5.15E-04	1.55E-09	6.79E-09		
Fluorene	86-73-7	Yes	2.80E-06	5.15E-04	1.44E-09	6.31E-09			5.15E-04	1.44E-09	6.31E-09			5.15E-04	1.44E-09	6.31E-09		
Phenanthrene	85-01-8	Yes	1.70E-05	5.15E-04	8.76E-09	3.84E-08			5.15E-04	8.76E-09	3.84E-08			5.15E-04	8.76E-09	3.84E-08		
Benzo(a)anthracene*	56-55-3	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Benzo(b)fluoranthene*	205-82-3	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Benzo(g,h,i)perylene	191-24-2	Yes	1.20E-06	5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09		
Benzo(k)fluoranthene*	205-82-3	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Chrysene*	218-01-9	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Dibenzo(a,h)anthracene*	53-70-3	Yes	1.20E-06	5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09		
Indeno(1,2,3-cd)pyrene*	193-39-5	Yes	1.80E-06	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		

AgroFarma Twin Fall
RTUs (NG)
Annual Operation

Toxic Air Pollutants Non-metals [2]	Main Office RTU 4 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 5 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 6 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL
Pentane	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below	5.15E-04	1.34E-03	5.87E-03	1.18E+02	Below
Benzene	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below	5.15E-04	1.08E-06	4.73E-06	8.00E-04	Below
3-Methylchloranthrene	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below	5.15E-04	9.27E-10	4.06E-09	2.50E-06	Below
Benzo(a)pyrene*	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below	5.15E-04	6.18E-10	2.71E-09	2.00E-06	Below
Formaldehyde	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below	5.15E-04	3.86E-05	1.69E-04	5.10E-04	Below
POM (7-PAH)[3]	5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below	5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below	5.15E-04	6.49E-09	2.84E-08	2.00E-06	Below
Hexane	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below	5.15E-04	9.27E-04	4.06E-03	1.20E+01	Below
Naphthalene	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below	5.15E-04	3.14E-07	1.38E-06	9.10E-05	Below
Toluene	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below	5.15E-04	1.75E-06	7.67E-06	2.50E+01	Below
2-Methylnapthalene	5.15E-04	1.24E-08	5.43E-08			5.15E-04	1.24E-08	5.43E-08			5.15E-04	1.24E-08	5.43E-08		
7, 12 - Dimethylbenz(a)anthracene	5.15E-04	8.24E-09	3.61E-08			5.15E-04	8.24E-09	3.61E-08			5.15E-04	8.24E-09	3.61E-08		
Acenaphthene	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Acenaphyhylene	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Anthracene	5.15E-04	1.24E-09	5.43E-09			5.15E-04	1.24E-09	5.43E-09			5.15E-04	1.24E-09	5.43E-09		
Dichlorobenzene	5.15E-04	6.18E-07	2.71E-06			5.15E-04	6.18E-07	2.71E-06			5.15E-04	6.18E-07	2.71E-06		
Flouranthene	5.15E-04	1.55E-09	6.79E-09			5.15E-04	1.55E-09	6.79E-09			5.15E-04	1.55E-09	6.79E-09		
Fluorene	5.15E-04	1.44E-09	6.31E-09			5.15E-04	1.44E-09	6.31E-09			5.15E-04	1.44E-09	6.31E-09		
Phenanthrene	5.15E-04	8.76E-09	3.84E-08			5.15E-04	8.76E-09	3.84E-08			5.15E-04	8.76E-09	3.84E-08		
Benzo(a)anthracene*	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Benzo(b)fluoranthene*	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Benzo(g,h,i)perylene	5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09		
Benzo(k)fluoranthene*	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Chrysene*	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		
Dibenzo(a,h)anthracene*	5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09			5.15E-04	6.18E-10	2.71E-09		
Indeno(1,2,3-cd)pyrene*	5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09			5.15E-04	9.27E-10	4.06E-09		

AgroFarma Twin Fall
RTUs (NG)
Annual Operation

	Meeting/RR/Plant Offices/Maint Office RTU Carrier 48A5,S,020 (indirect fired)					Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired)				
Toxic Air Pollutants Non-metals [2]	**Input**	**Emission Rate**	**Emission Rate**	**IDAPA 58.01.01.585 or 586 EL**	**Emission Rate vs. EL**	**Input**	**Emission Rate**	**Emission Rate**	**IDAPA 58.01.01.585 or 586 EL**	**Emission Rate vs. EL**
	10^6SCF/hr	**(lb/hr)**	**(ton/yr)**	**(lb/hr)**		**10^6SCF/hr**	**(lb/hr)**	**(ton/year)**	**(lb/hr)**	
Pentane	3.43E-04	8.92E-04	3.91E-03	1.18E+02	Below	1.14E-03	2.96E-03	1.30E-02	1.18E+02	Below
Benzene	3.43E-04	7.20E-07	3.15E-06	8.00E-04	Below	1.14E-03	2.39E-06	1.05E-05	8.00E-04	Below
3-Methylchloranthrene	3.43E-04	6.17E-10	2.70E-09	2.50E-06	Below	1.14E-03	2.05E-09	8.98E-09	2.50E-06	Below
Benzo(a)pyrene*	3.43E-04	4.12E-10	1.80E-09	2.00E-06	Below	1.14E-03	1.37E-09	6.00E-09	2.00E-06	Below
Formaldehyde	3.43E-04	2.57E-05	1.13E-04	5.10E-04	Below	1.14E-03	8.55E-05	3.74E-04	5.10E-04	Below
POM (7-PAH)[3]	3.43E-04	4.32E-09	1.89E-08	2.00E-06	Below	1.14E-03	1.44E-08	6.29E-08	2.00E-06	Below
Hexane	3.43E-04	6.17E-04	2.70E-03	1.20E+01	Below	1.14E-03	2.05E-03	8.98E-03	1.20E+01	Below
Naphthalene	3.43E-04	2.09E-07	9.15E-07	9.10E-05	Below	1.14E-03	6.95E-07	3.04E-06	9.10E-05	Below
Toluene	3.43E-04	1.17E-06	5.12E-06	2.50E+01	Below	1.14E-03	3.88E-06	1.70E-05	2.50E+01	Below
2-Methylnapthalene	3.43E-04	8.23E-09	3.60E-08			1.14E-03	2.74E-08	1.20E-07		
7, 12 - Dimethylbenz(a)anthracene	3.43E-04	5.49E-09	2.40E-08			1.14E-03	1.82E-08	7.97E-08		
Acenaphthene	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Acenaphyhylene	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Anthracene	3.43E-04	8.23E-10	3.60E-09			1.14E-03	2.74E-09	1.20E-08		
Dichlorobenzene	3.43E-04	4.12E-07	1.80E-06			1.14E-03	1.37E-06	6.00E-06		
Flouranthene	3.43E-04	1.03E-09	4.51E-09			1.14E-03	3.42E-09	1.50E-08		
Fluorene	3.43E-04	9.60E-10	4.20E-09			1.14E-03	3.19E-09	1.40E-08		
Phenanthrene	3.43E-04	5.83E-09	2.55E-08			1.14E-03	1.94E-08	8.50E-08		
Benzo(a)anthracene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Benzo(b)fluoranthene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Benzo(g,h,i)perylene	3.43E-04	4.12E-10	1.80E-09			1.14E-03	1.37E-09	6.00E-09		
Benzo(k)fluoranthene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Chrysene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Dibenzo(a,h)anthracene*	3.43E-04	4.12E-10	1.80E-09			1.14E-03	1.37E-09	6.00E-09		
Indeno(1,2,3-cd)pyrene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		

AgroFarma Twin Falls - Chobani Faciltiy Emissions Estimate

RTUs (NG)

Annual Operation 8,760 hours/year

Toxic Air Pollutants Metals [4]	CAS Number	CAA 112(b) HAP	Emission Factor (lb/10^6 scf)	Main Office RTU 1 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 2 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 3 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/yr)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL
Mercury	7439-97-6	Yes	2.60E-04	5.15E-04	1.34E-07	5.87E-07			5.15E-04	1.34E-07	5.87E-07			5.15E-04	1.34E-07	5.87E-07		
Arsenic	7440-38-2	Yes	2.00E-04	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below
Nickel	7440-02-0	Yes	2.10E-03	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below
Beryllium	7440-41-7	Yes	1.20E-05	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below
Cadmium	7440-43-9	Yes	1.10E-03	5.15E-04	5.67E-07	2.48E-06	3.70E-06	Below	5.15E-04	5.67E-07	2.48E-06	3.70E-06	Below	5.15E-04	5.67E-07	2.48E-06	3.70E-06	Below
Chromium	7440-47-3	Yes	1.40E-03	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below
Cobalt	7440-48-4	Yes	8.40E-05	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below
Manganese	7439-96-5	Yes	3.80E-04	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below
Molybdenum	7439-98-7	Yes	1.10E-03	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below
Selenium	7782-49-2	Yes	2.40E-05	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below
Vanadium	1314-62-1	No	2.30E-03	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below
Zinc	7440-66-6	No	2.90E-02	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below
Barium	7440-39-3	No	4.40E-03	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below
Copper	7440-50-8	No	8.50E-04	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below
			Total Non-Metal HAPs		9.69E-04	4.25E-03			Total Non-Metal HAPs	9.69E-04	4.25E-03			Total Non-Me	9.69E-04	4.25E-03		Total Non-
			Total Metal HAPs		3.43E-06	1.50E-05			Total Metal HAPs	3.43E-06	1.50E-05			Total Metal H	3.43E-06	1.50E-05		Total
			Total HAPs		9.72E-04	4.27E-03			Total HAPs	9.72E-04	4.27E-03			Total HAPs	9.72E-04	4.27E-03		

Notes:

[1] Criteria Pollutant emission factors for small uncontrolled boilers as stated AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-1 and 1.4-2. PM emission factor is assumed to equal PM10.
Conversion Factor: 1020 BTU/SCF

[2] Toxic Air Pollutants emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3.

[3] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[4] Toxic Air Pollutant Metal emission factors from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4.

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Main Office RTU 1 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] metric ton/yr	Main Office RTU 2 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Main Office RTU 3 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Main Office RTU 4 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Main Office RTU 5 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] metric ton/y
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C Equation C-1 Tier 1	515	4,511,400	245.89	515	4,511,400	245.89	515	4,511,400	245.89	515	4,511,400	245.89	515	4,511,400	245.89
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	515	4,511,400	4.64E-04	515	4,511,400	4.64E-04	515	4,511,400	4.64E-04	515	4,511,400	4.64E-04	515	4,511,400	4.64E-04
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	515	4,511,400	4.64E-03	515	4,511,400	4.64E-03	515	4,511,400	4.64E-03	515	4,511,400	4.64E-03	515	4,511,400	4.64E-03
CO2e			40 CFR 98 Part A			246.13			246.13			246.13			246.13			246.13

Notes

[5] Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[6] Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$
Fuel = Volume of fuel combusted per year, (SCF/Year)
EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)
HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)
1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7] CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)
Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1
GWP CO_2 = 1.00
GWP CH_4 = 21.00

AgroFarma Twin Fall
RTUs (NG)
Annual Operation

Toxic Air Pollutants Metals [4]	Main Office RTU 4 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 5 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL	Main Office RTU 6 Carrier 48A5,T,030 (indirect fired) Input 10^6SCF/hr	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585 or 586 EL (lb/hr)	Emission Rate vs. EL
Mercury	5.15E-04	1.34E-07	5.87E-07			5.15E-04	1.34E-07	5.87E-07			5.15E-04	1.34E-07	5.87E-07		
Arsenic	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below	5.15E-04	1.03E-07	4.51E-07	1.50E-06	Below
Nickel	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below	5.15E-04	1.08E-06	4.73E-06	2.75E-05	Below
Beryllium	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below	5.15E-04	6.18E-09	2.71E-08	2.80E-05	Below
Cadmium	5.15E-04	5.67E-07	2.48E-06	3.70E-06	Below	5.15E-04	5.67E-07	2.48E-06	3.70E-06	**Below**	5.15E-04	5.67E-07	2.48E-06	3.70E-06	Below
Chromium	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below	5.15E-04	7.21E-07	3.16E-06	3.30E-02	Below
Cobalt	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below	5.15E-04	4.33E-08	1.90E-07	3.30E-03	Below
Manganese	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below	5.15E-04	1.96E-07	8.58E-07	6.70E-02	Below
Molybdenum	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below	5.15E-04	5.67E-07	2.48E-06	3.33E-01	Below
Selenium	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below	5.15E-04	1.24E-08	5.43E-08	1.30E-02	Below
Vanadium	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below	5.15E-04	1.18E-06	5.17E-06	3.00E-03	Below
Zinc	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below	5.15E-04	1.49E-05	6.53E-05	3.33E-01	Below
Barium	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below	5.15E-04	2.27E-06	9.94E-06	3.30E-02	Below
Copper	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below	5.15E-04	4.38E-07	1.92E-06	1.30E-02	Below
	Metal HAPs	9.69E-04	4.25E-03			**Total Non-Metal HAPs**	9.69E-04	4.25E-03			**Total Non-Metal HAPs**	9.69E-04	4.25E-03		
	Metal HAPs	3.43E-06	1.50E-05			**Total Metal HAPs**	3.43E-06	1.50E-05			**Total Metal HAPs**	3.43E-06	1.50E-05		
	Total HAPs	9.72E-04	4.27E-03			**Total HAPs**	9.72E-04	4.27E-03			**Total HAPs**	9.72E-04	4.27E-03		

Green House Gases	Main Office RTU 6 Carrier 48A5,T,030 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr	Meeting/RR/Plant Offices/Maint Office RTU Carrier 48A5,S,020 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)	Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired) Input (SCF/hr)	Input (SCF/yr)	Emission Rate[5,6,7] (metric ton/yr)
CO_2	515	4,511,400	245.89	343	3,004,680	163.77	1,141	9,995,160	544.78
N_2O	515	4,511,400	4.64E-04	343	3,004,680	3.09E-04	1,141	9,995,160	1.03E-03
CH_4	515	4,511,400	4.64E-03	343	3,004,680	3.09E-03	1,141	9,995,160	0.01
CO2e			246.13			163.93			545.31

AgroFarma Twin Fall
RTUs (NG)
Annual Operation

	Meeting/RR/Plant Offices/Maint Office RTU Carrier 48A5,S,020 (indirect fired)					Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired)				
Toxic Air Pollutants Non-metals [2]	**Input**	**Emission Rate**	**Emission Rate**	**IDAPA 58.01.01.585 or 586 EL**	**Emission Rate vs. EL**	**Input**	**Emission Rate**	**Emission Rate**	**IDAPA 58.01.01.585 or 586 EL**	**Emission Rate vs. EL**
	10^6SCF/hr	**(lb/hr)**	**(ton/yr)**	**(lb/hr)**		**10^6SCF/hr**	**(lb/hr)**	**(ton/year)**	**(lb/hr)**	
Pentane	3.43E-04	8.92E-04	3.91E-03	1.18E+02	Below	1.14E-03	2.96E-03	1.30E-02	1.18E+02	Below
Benzene	3.43E-04	7.20E-07	3.15E-06	8.00E-04	Below	1.14E-03	2.39E-06	1.05E-05	8.00E-04	Below
3-Methylchloranthrene	3.43E-04	6.17E-10	2.70E-09	2.50E-06	Below	1.14E-03	2.05E-09	8.98E-09	2.50E-06	Below
Benzo(a)pyrene*	3.43E-04	4.12E-10	1.80E-09	2.00E-06	Below	1.14E-03	1.37E-09	6.00E-09	2.00E-06	Below
Formaldehyde	3.43E-04	2.57E-05	1.13E-04	5.10E-04	Below	1.14E-03	8.55E-05	3.74E-04	5.10E-04	Below
POM (7-PAH)[3]	3.43E-04	4.32E-09	1.89E-08	2.00E-06	Below	1.14E-03	1.44E-08	6.29E-08	2.00E-06	Below
Hexane	3.43E-04	6.17E-04	2.70E-03	1.20E+01	Below	1.14E-03	2.05E-03	8.98E-03	1.20E+01	Below
Naphthalene	3.43E-04	2.09E-07	9.15E-07	9.10E-05	Below	1.14E-03	6.95E-07	3.04E-06	9.10E-05	Below
Toluene	3.43E-04	1.17E-06	5.12E-06	2.50E+01	Below	1.14E-03	3.88E-06	1.70E-05	2.50E+01	Below
2-Methylnapthalene	3.43E-04	8.23E-09	3.60E-08			1.14E-03	2.74E-08	1.20E-07		
7, 12 - Dimethylbenz(a)anthracene	3.43E-04	5.49E-09	2.40E-08			1.14E-03	1.82E-08	7.97E-08		
Acenaphthene	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Acenaphyhylene	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Anthracene	3.43E-04	8.23E-10	3.60E-09			1.14E-03	2.74E-09	1.20E-08		
Dichlorobenzene	3.43E-04	4.12E-07	1.80E-06			1.14E-03	1.37E-06	6.00E-06		
Flouranthene	3.43E-04	1.03E-09	4.51E-09			1.14E-03	3.42E-09	1.50E-08		
Fluorene	3.43E-04	9.60E-10	4.20E-09			1.14E-03	3.19E-09	1.40E-08		
Phenanthrene	3.43E-04	5.83E-09	2.55E-08			1.14E-03	1.94E-08	8.50E-08		
Benzo(a)anthracene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Benzo(b)fluoranthene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Benzo(g,h,i)perylene	3.43E-04	4.12E-10	1.80E-09			1.14E-03	1.37E-09	6.00E-09		
Benzo(k)fluoranthene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Chrysene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		
Dibenzo(a,h)anthracene*	3.43E-04	4.12E-10	1.80E-09			1.14E-03	1.37E-09	6.00E-09		
Indeno(1,2,3-cd)pyrene*	3.43E-04	6.17E-10	2.70E-09			1.14E-03	2.05E-09	8.98E-09		

AgroFarma Twin Fall
RTUs (NG)
Annual Operation

Toxic Air Pollutants Metals [4]	Meeting/RR/Plant Offices/Maint Office RTU Carrier 48A5,S,020 (indirect fired) Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL	Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired) Input	Emission Rate	Emission Rate	IDAPA 58.01.01.585 or 586 EL	Emission Rate vs. EL
	10^6SCF/hr	(lb/hr)	(ton/yr)	(lb/hr)		10^6SCF/hr	(lb/hr)	(ton/year)	(lb/hr)	
Mercury	3.43E-04	8.92E-08	3.91E-07			1.14E-03	2.96E-07	1.30E-06		
Arsenic	3.43E-04	6.86E-08	3.00E-07	1.50E-06	Below	1.14E-03	2.28E-07	9.99E-07	1.50E-06	Below
Nickel	3.43E-04	7.20E-07	3.15E-06	2.75E-05	Below	1.14E-03	2.39E-06	1.05E-05	2.75E-05	Below
Beryllium	3.43E-04	4.12E-09	1.80E-08	2.80E-05	Below	1.14E-03	1.37E-08	6.00E-08	2.80E-05	Below
Cadmium	3.43E-04	3.77E-07	1.65E-06	3.70E-06	Below	1.14E-03	1.25E-06	5.48E-06	3.70E-06	Below
Chromium	3.43E-04	4.80E-07	2.10E-06	3.30E-02	Below	1.14E-03	1.60E-06	7.01E-06	3.30E-02	Below
Cobalt	3.43E-04	2.88E-08	1.26E-07	3.30E-03	Below	1.14E-03	9.58E-08	4.20E-07	3.30E-03	Below
Manganese	3.43E-04	1.30E-07	5.69E-07	6.70E-02	Below	1.14E-03	4.33E-07	1.90E-06	6.70E-02	Below
Molybdenum	3.43E-04	3.77E-07	1.65E-06	3.33E-01	Below	1.14E-03	1.25E-06	5.48E-06	3.33E-01	Below
Selenium	3.43E-04	8.23E-09	3.60E-08	1.30E-02	Below	1.14E-03	2.74E-08	1.20E-07	1.30E-02	Below
Vanadium	3.43E-04	7.89E-07	3.46E-06	3.00E-03	Below	1.14E-03	2.62E-06	1.15E-05	3.00E-03	Below
Zinc	3.43E-04	9.95E-06	4.36E-05	3.33E-01	Below	1.14E-03	3.31E-05	1.45E-04	3.33E-01	Below
Barium	3.43E-04	1.51E-06	6.61E-06	3.30E-02	Below	1.14E-03	5.02E-06	2.20E-05	3.30E-02	Below
Copper	3.43E-04	2.92E-07	1.28E-06	1.30E-02	Below	1.14E-03	9.69E-07	4.24E-06	1.30E-02	Below
	Total Non-Metal HAPs	6.45E-04	2.82E-03			**Total Non-Metal HAPs**	2.14E-03	9.39E-03		
	Total Metal HAPs	2.28E-06	9.99E-06			**Total Metal HAPs**	7.58E-06	3.33E-05		
	Total HAPs	6.47E-04	2.83E-03			**Total HAPs**	2.15E-03	0.01		

AgroFarma Twin Falls - Chobani Facility Baseline Emission Estimate Summary
Hazardous Air Pollutant Emissions Inventory

HAP Pollutants	CAS No.	PTE (tons/year)
Benzene	71-43-2	3.65E-04
3-Methylchloranthrene	56-49-5	3.13E-07
Benzo(a)pyrene*	50-32-8	2.09E-07
Formaldehyde	50-00-0	1.30E-02
POM (7-PAH)[4]		2.00E-06
Hexane	110-54-3	3.13E-01
Naphthalene	91-20-3	1.06E-04
Toluene	108-88-3	5.93E-04
2-Methylnapthalene	97-57-6	4.18E-06
7, 12 - Dimethylbenz(a)anthracene		2.78E-06
Acenaphthene	83-32-9	3.13E-07
Acenaphyhylene	203-96-8	3.13E-07
Anthracene	120-12-7	4.18E-07
Dichlorobenzene	25321-22-6	2.09E-04
Flouranthene	206-44-0	5.22E-07
Fluorene	86-73-7	4.87E-07
Phenanthrene	85-01-8	2.96E-06
Benzo(a)anthracene*	56-55-3	3.13E-07
Benzo(b)fluoranthene*	205-82-3	3.13E-07
Benzo(g,h,i)perylene	191-24-2	2.09E-07
Benzo(k)fluoranthene*	205-82-3	3.13E-07
Chrysene*	218-01-9	3.13E-07
Dibenzo(a,h)anthracene*	53-70-3	2.09E-07
Indeno(1,2,3-cd)pyrene*	193-39-5	3.13E-07
Metals		
Mercury	7439-97-6	4.59E-05
Arsenic	7440-38-2	3.53E-05
Nickel	7440-02-0	3.71E-04
Beryllium	7440-41-7	2.12E-06
Cadmium	7440-43-9	1.94E-04
Chromium	7440-47-3	2.47E-04
Cobalt	7440-48-4	1.49E-05
Manganese	7439-96-5	6.74E-05
Molybdenum	7439-98-7	1.94E-04
Selenium	7782-49-2	4.24E-06
Total		**0.33**

AgroFarma Twin Falls - Chobani Facility Baseline Emission Estimate Summary

GHGs Pollutants

Criteria Pollutants Emissions Unit Name	Stack ID	CO_2 Metric Tons/Yr	CO_3 Short Tons/Yr	N_2O Metric Tons/Yr	N_2O Short Tons/Yr	CH_4 Metric Tons/Yr	CH_5 Short Tons/Yr	CO2e Metric Tons/Yr	CO2e Short Tons/Yr
Cleaver Brooks CBLE-700-800 NG Boiler 1	BOILER1	15287.79	15639.41	0.02883	0.02949	0.28830	0.29493	15,302.78	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 2	BOILER2	15287.79	15639.41	0.02883	0.02949	0.28830	0.29493	15,302.78	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 3	BOILER3	15287.79	15639.41	0.02883	0.02949	0.28830	0.29493	15,302.78	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 4	BOILER4	15287.79	15639.41	0.02883	0.02949	0.28830	0.29493	15,302.78	16,868.25
Cleaver Brooks CBLE-700-800 NG Boiler 5	BOILER5	15287.79	15639.41	0.02883	0.02949	0.28830	0.29493	15,302.78	16,868.25
Boiler Room MAU 1 - Rupp Air RAM 225 (50,000 cfm, direct fired)	BRMAU1	1679.23	1717.85	0.00317	0.00324	0.03000	0.03069	1,680.84	1,852.79
Lab MAU - Aaon RN-050 (6,000 cfm, indirect fired RTU)	LABMAU	379.10	387.82	0.00072	0.00074	0.01000	0.01023	379.53	418.36
Battery MAU - Rupp Air RAM 222 (42,000 cfm, direct fired)	BATTMAU	1679.23	1717.85	0.00317	0.00324	0.03000	0.03069	1,680.84	1,852.79
Main Office RTU 1 - Carrier 48A5,T,030 (indirect fired)	RTU1	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Main Office RTU 2 - Carrier 48A5,T,030 (indirect fired)	RTU2	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Main Office RTU 3 - Carrier 48A5,T,030 (indirect fired)	RTU3	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Main Office RTU 4 - Carrier 48A5,T,030 (indirect fired)	RTU4	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Main Office RTU 5 - Carrier 48A5,T,030 (indirect fired)	RTU5	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Main Office RTU 6 - Carrier 48A5,T,030 (indirect fired)	RTU6	245.89	251.55	0.00046	0.00047	0.00464	0.00475	246.13	271.31
Meeting/RR/Plant Offices/Maintenance Office RTU Carrier 48A5,S,020 (indirect fired RTU)	PLANT	163.77	167.54	0.00031	0.00032	0.00309	0.00316	163.93	180.70
Mantenance/Parts/Fab RTU Carrier 48A5,S,060 (indirect fired RTU)	MAINT	544.78	557.31	0.00103	0.00105	0.01000	0.01023	545.31	601.10
Reznor VR-2---60 Receiveing Bay IRH 1	IRH1	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 2	IRH2	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 3	IRH3	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 4	IRH4	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 5	IRH5	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 6	IRH6	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 7	IRH7	93.58	95.73	0.00018	0.00018	0.00177	0.00181	93.67	103.25
Reznor VR-2---60 Receiveing Bay IRH 8	IRH8	93.58	95.73	0.00018	0.00018	0.00000	0.00000	93.63	103.21
	Total	83,109.04	85,020.56	0.16	0.16	1.56	1.60	83,190.45	91,700.81

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 1

Boiler Heat Input (MMBTU/hr)	32.659
Manufacturer	Cleaver Brooks
Model No.	CBLE-700-800
Fuel Type	Natural Gas
Natural Gas Fuel Heat Value (BTU/SCF)	1,020
Natural Gas Use (10^6 scf/hr)	0.0320
Annual Operation (hrs/yr)	8,760

Cleaver Brooks Boiler Expected Emission Data for Model CB(LE)

Criteria Pollutant	Emission Factor[1] (lb/MM Btu)	Emission Rate (lb/hr)	Emission Rate (ton/year)
Total Particulate Matter (PM)	0.010	0.33	1.45
Nitrogen Oxides (NOx)	0.071	2.32	10.16
Sulfur Dioxide (SO_2)	0.0006	0.02	0.09
Carbon Monoxide (CO)	0.036	1.18	5.17
VOC	0.004	0.13	0.57
Lead[2]	5.00E-04	1.60E-05	7.01E-05

PM gr/scf at 3% O2 = PM lb/MMBTU x (20.9-3)/20.9 x 7000 gr/1 lb x 1/f Factor for NG dscf/MMBTU

PM gr/scf at 3% O2 **0.007 gr/dscf**

where:

f factor for NG = 8710 dscf/MMBTU 40 CFR Part 75 specifies a Fd value of 8,710 dscf/mmBtu

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 1

Toxic Air Pollutants Non-metals [3]	CAS No.	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	CAA 112(b) HAP?
Pentane	109-66-0	2.60E+00	8.32E-02	3.64E-01	1.18E+02	Below	No
Benzene	71-43-2	2.10E-03	6.72E-05	2.94E-04	8.00E-04	Below	Yes
3-Methylchloranthrene	56-49-5	1.80E-06	5.76E-08	2.52E-07	2.50E-06	Below	Yes
Benzo(a)pyrene*	50-32-8	1.20E-06	3.84E-08	1.68E-07	2.00E-06	Below	Yes
Formaldehyde	50-00-0	7.50E-02	2.40E-03	1.05E-02	5.10E-04	**Exceeds**	Yes
POM (7-PAH)[4]			3.65E-07	1.60E-06	2.00E-06	Below	Yes
Hexane	110-54-3	1.80E+00	5.76E-02	2.52E-01	1.20E+01	Below	Yes
Naphthalene	91-20-3	6.10E-04	1.95E-05	8.54E-05	9.10E-05	Below	Yes
Toluene	108-88-3	3.40E-03	1.09E-04	4.77E-04	2.50E+01	Below	Yes
2-Methylnapthalene	97-57-6	2.40E-05	7.68E-07	3.36E-06			Yes
7, 12 - Dimethylbenz(a)anthracene		1.60E-05	5.12E-07	2.24E-06			Yes
Acenaphthene	83-32-9	1.80E-06	5.76E-08	2.52E-07			Yes
Acenaphyhylene	203-96-8	1.80E-06	5.76E-08	2.52E-07			Yes
Anthracene	120-12-7	2.40E-06	7.68E-08	3.36E-07			Yes
Dichlorobenzene	25321-22-6	1.20E-03	3.84E-05	1.68E-04			Yes
Flouranthene	206-44-0	3.00E-06	9.60E-08	4.20E-07			Yes
Fluorene	86-73-7	2.80E-06	8.96E-08	3.92E-07			Yes
Phenanthrene	85-01-8	1.70E-05	5.44E-07	2.38E-06			Yes
Benzo(a)anthracene*	56-55-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(b)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(g,h,i)perylene	191-24-2	1.20E-06	3.84E-08	1.68E-07			Yes
Benzo(k)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Chrysene*	218-01-9	1.80E-06	5.76E-08	2.52E-07			Yes
Dibenzo(a,h)anthracene*	53-70-3	1.20E-06	3.84E-08	1.68E-07			Yes
Indeno(1,2,3-cd)pyrene*	193-39-5	1.80E-06	5.76E-08	2.52E-07			Yes

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 1

Toxic Air Pollutants Metals [5]	CAS Number	Emission Factor ($lb/10^6$ scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	PTE Emission Rate vs. EL	CAA 112(b) HAP?
Mercury	7439-97-6	2.60E-04	8.32E-06	3.64E-05			Yes
Arsenic	7440-38-2	2.00E-04	6.40E-06	2.80E-05	1.50E-06	**Exceeds**	Yes
Nickel	7440-02-0	2.10E-03	6.72E-05	2.94E-04	2.75E-05	**Exceeds**	Yes
Beryllium	7440-41-7	1.20E-05	3.84E-07	1.68E-06	2.80E-05	Below	Yes
Cadmium	7440-43-9	1.10E-03	3.52E-05	1.54E-04	3.70E-06	**Exceeds**	Yes
Chromium	7440-47-3	1.40E-03	4.48E-05	1.96E-04	3.30E-02	Below	Yes
Cobalt	7440-48-4	8.40E-05	2.69E-06	1.18E-05	3.30E-03	Below	Yes
Manganese	7439-96-5	3.80E-04	1.22E-05	5.34E-05	6.70E-02	Below	Yes
Molybdenum	7439-98-7	1.10E-03	3.52E-05	1.54E-04	3.33E-01	Below	Yes
Selenium	7782-49-2	2.40E-05	7.68E-07	3.36E-06	1.30E-02	Below	Yes
Vanadium	1314-62-1	2.30E-03	7.36E-05	3.22E-04	3.00E-03	Below	No
Zinc	7440-66-6	2.90E-02	9.28E-04	4.06E-03	3.33E-01	Below	No
Barium	7440-39-3	4.40E-03	1.41E-04	6.18E-04	3.30E-02	Below	No
Copper	7440-50-8	8.50E-04	2.72E-05	1.19E-04	1.30E-02	Below	No
		Total Non-Metal HAPs	6.02E-02	2.64E-01			
		Total Metal HAPs	2.13E-04	9.33E-04			
		Total HAPs	0.06	0.26			

Notes:

[1] Criteria Pollutants as stated in Cleaver Brooks Boiler Expected Emission Data for Model CB(LE). PM emission factor is assumed to equal PM10.

[2] Lead Emission factor from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2. Emission factor units is $lb/10^6$ SCF.

[3] Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

[4] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[5] Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4).

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 1

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler 1 Input (SCF/hr)	Boiler 1 Input (SCF/yr)	Boiler 1 Emission Rate[6,7,8] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C	32,019	280,486,440	15287.79
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-02
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-01
CO2e			40 CFR 98 Part A			15,302.78

Notes

[6]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[8]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)

Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 2

Boiler Heat Input (MMBTU/hr)	32.659
Manufacturer	Cleaver Brooks
Model No.	CBLE-700-800
Fuel Type	Natural Gas
Natural Gas Fuel Heat Value (BTU/SCF)	1,020
Natural Gas Use (10^6 scf/hr)	0.0320
Annual Operation (hrs/yr)	8,760

Cleaver Brooks Boiler Expected Emission Data for Model CB(LE)

Criteria Pollutant	Emission Factor[1] (lb/MM Btu)	Emission Rate (lb/hr)	Emission Rate (ton/year)
Total Particulate Matter (PM)	0.010	0.33	1.45
Nitrogen Oxides (NOx)	0.071	2.32	10.16
Sulfur Dioxide (SO_2)	0.0006	0.02	0.09
Carbon Monoxide (CO)	0.036	1.18	5.17
VOC	0.004	0.13	0.57
Lead[2]	5.00E-04	1.60E-05	7.01E-05

PM gr/scf at 3% O2 = PM lb/MMBTU x (20.9-3)/20.9 x 7000 gr/1 lb x 1/f Factor for NG dscf/MMBTU

PM gr/scf at 3% O2 **0.007 gr/dscf**

where:

f factor for NG = 8710 dscf/MMBTU 40 CFR Part 75 specifies a Fd value of 8,710 dscf/mmBtu

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 2

Toxic Air Pollutants Non-metals [3]	CAS No.	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	CAA 112(b) HAP?
Pentane	109-66-0	2.60E+00	8.32E-02	3.64E-01	1.18E+02	Below	No
Benzene	71-43-2	2.10E-03	6.72E-05	2.94E-04	8.00E-04	Below	Yes
3-Methylchloranthrene	56-49-5	1.80E-06	5.76E-08	2.52E-07	2.50E-06	Below	Yes
Benzo(a)pyrene*	50-32-8	1.20E-06	3.84E-08	1.68E-07	2.00E-06	Below	Yes
Formaldehyde	50-00-0	7.50E-02	2.40E-03	1.05E-02	5.10E-04	**Exceeds**	Yes
POM (7-PAH)[4]			3.65E-07	1.60E-06	2.00E-06	Below	Yes
Hexane	110-54-3	1.80E+00	5.76E-02	2.52E-01	1.20E+01	Below	Yes
Naphthalene	91-20-3	6.10E-04	1.95E-05	8.54E-05	9.10E-05	Below	Yes
Toluene	108-88-3	3.40E-03	1.09E-04	4.77E-04	2.50E+01	Below	Yes
2-Methylnapthalene	97-57-6	2.40E-05	7.68E-07	3.36E-06			Yes
7, 12 - Dimethylbenz(a)anthracene		1.60E-05	5.12E-07	2.24E-06			Yes
Acenaphthene	83-32-9	1.80E-06	5.76E-08	2.52E-07			Yes
Acenaphyhylene	203-96-8	1.80E-06	5.76E-08	2.52E-07			Yes
Anthracene	120-12-7	2.40E-06	7.68E-08	3.36E-07			Yes
Dichlorobenzene	25321-22-6	1.20E-03	3.84E-05	1.68E-04			Yes
Flouranthene	206-44-0	3.00E-06	9.60E-08	4.20E-07			Yes
Fluorene	86-73-7	2.80E-06	8.96E-08	3.92E-07			Yes
Phenanthrene	85-01-8	1.70E-05	5.44E-07	2.38E-06			Yes
Benzo(a)anthracene*	56-55-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(b)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(g,h,i)perylene	191-24-2	1.20E-06	3.84E-08	1.68E-07			Yes
Benzo(k)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Chrysene*	218-01-9	1.80E-06	5.76E-08	2.52E-07			Yes
Dibenzo(a,h)anthracene*	53-70-3	1.20E-06	3.84E-08	1.68E-07			Yes
Indeno(1,2,3-cd)pyrene*	193-39-5	1.80E-06	5.76E-08	2.52E-07			Yes

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 2

Toxic Air Pollutants Metals [5]	CAS Number	Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	PTE Emission Rate vs. EL	CAA 112(b) HAP?
Mercury	7439-97-6	2.60E-04	8.32E-06	3.64E-05			Yes
Arsenic	7440-38-2	2.00E-04	6.40E-06	2.80E-05	1.50E-06	**Exceeds**	Yes
Nickel	7440-02-0	2.10E-03	6.72E-05	2.94E-04	2.75E-05	**Exceeds**	Yes
Beryllium	7440-41-7	1.20E-05	3.84E-07	1.68E-06	2.80E-05	Below	Yes
Cadmium	7440-43-9	1.10E-03	3.52E-05	1.54E-04	3.70E-06	**Exceeds**	Yes
Chromium	7440-47-3	1.40E-03	4.48E-05	1.96E-04	3.30E-02	Below	Yes
Cobalt	7440-48-4	8.40E-05	2.69E-06	1.18E-05	3.30E-03	Below	Yes
Manganese	7439-96-5	3.80E-04	1.22E-05	5.34E-05	6.70E-02	Below	Yes
Molybdenum	7439-98-7	1.10E-03	3.52E-05	1.54E-04	3.33E-01	Below	Yes
Selenium	7782-49-2	2.40E-05	7.68E-07	3.36E-06	1.30E-02	Below	Yes
Vanadium	1314-62-1	2.30E-03	7.36E-05	3.22E-04	3.00E-03	Below	No
Zinc	7440-66-6	2.90E-02	9.28E-04	4.06E-03	3.33E-01	Below	No
Barium	7440-39-3	4.40E-03	1.41E-04	6.18E-04	3.30E-02	Below	No
Copper	7440-50-8	8.50E-04	2.72E-05	1.19E-04	1.30E-02	Below	No
		Total Non-Metal HAPs	6.02E-02	2.64E-01			
		Total Metal HAPs	2.13E-04	9.33E-04			
		Total HAPs	0.06	0.26			

Notes:

[1] Criteria Pollutants as stated in Cleaver Brooks Boiler Expected Emission Data for Model CB(LE). PM emission factor is assumed to equal PM10.

[2] Lead Emission factor from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2. Emission factor units is lb/10^6 SCF.

[3] Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

[4] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[5] Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4).

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 2

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler 2 Input (SCF/hr)	Boiler 2 Input (SCF/yr)	Boiler 2 Emission Rate[6,7,8] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C	32,019	280,486,440	15287.79
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-02
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-01
CO2e			40 CFR 98 Part A			15,302.78

Notes

[6]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[8]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)

Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 3

Boiler Heat Input (MMBTU/hr)	32.659
Manufacturer	Cleaver Brooks
Model No.	CBLE-700-800
Fuel Type	Natural Gas
Natural Gas Fuel Heat Value (BTU/SCF)	1,020
Natural Gas Use (10^6 scf/hr)	0.0320
Annual Operation (hrs/yr)	8,760

Cleaver Brooks Boiler Expected Emission Data for Model CB(LE)

Criteria Pollutant	Emission Factor[1] (lb/MM Btu)	Emission Rate (lb/hr)	Emission Rate (ton/year)
Total Particulate Matter (PM)	0.010	0.33	1.45
Nitrogen Oxides (NOx)	0.071	2.32	10.16
Sulfur Dioxide (SO_2)	0.0006	0.02	0.09
Carbon Monoxide (CO)	0.036	1.18	5.17
VOC	0.004	0.13	0.57
Lead[2]	5.00E-04	1.60E-05	7.01E-05

PM gr/scf at 3% O2 = PM lb/MMBTU x (20.9-3)/20.9 x 7000 gr/1 lb x 1/f Factor for NG dscf/MMBTU

PM gr/scf at 3% O2 **0.007 gr/dscf**

where:

f factor for NG = 8710 dscf/MMBTU 40 CFR Part 75 specifies a Fd value of 8,710 dscf/mmBtu

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 3

Toxic Air Pollutants Non-metals [3]	CAS No.	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	CAA 112(b) HAP?
Pentane	109-66-0	2.60E+00	8.32E-02	3.64E-01	1.18E+02	Below	No
Benzene	71-43-2	2.10E-03	6.72E-05	2.94E-04	8.00E-04	Below	Yes
3-Methylchloranthrene	56-49-5	1.80E-06	5.76E-08	2.52E-07	2.50E-06	Below	Yes
Benzo(a)pyrene*	50-32-8	1.20E-06	3.84E-08	1.68E-07	2.00E-06	Below	Yes
Formaldehyde	50-00-0	7.50E-02	2.40E-03	1.05E-02	5.10E-04	**Exceeds**	Yes
POM (7-PAH)[4]			3.65E-07	1.60E-06	2.00E-06	Below	Yes
Hexane	110-54-3	1.80E+00	5.76E-02	2.52E-01	1.20E+01	Below	Yes
Naphthalene	91-20-3	6.10E-04	1.95E-05	8.54E-05	9.10E-05	Below	Yes
Toluene	108-88-3	3.40E-03	1.09E-04	4.77E-04	2.50E+01	Below	Yes
2-Methylnapthalene	97-57-6	2.40E-05	7.68E-07	3.36E-06			Yes
7, 12 - Dimethylbenz(a)anthracene		1.60E-05	5.12E-07	2.24E-06			Yes
Acenaphthene	83-32-9	1.80E-06	5.76E-08	2.52E-07			Yes
Acenaphyhylene	203-96-8	1.80E-06	5.76E-08	2.52E-07			Yes
Anthracene	120-12-7	2.40E-06	7.68E-08	3.36E-07			Yes
Dichlorobenzene	25321-22-6	1.20E-03	3.84E-05	1.68E-04			Yes
Flouranthene	206-44-0	3.00E-06	9.60E-08	4.20E-07			Yes
Fluorene	86-73-7	2.80E-06	8.96E-08	3.92E-07			Yes
Phenanthrene	85-01-8	1.70E-05	5.44E-07	2.38E-06			Yes
Benzo(a)anthracene*	56-55-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(b)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(g,h,i)perylene	191-24-2	1.20E-06	3.84E-08	1.68E-07			Yes
Benzo(k)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Chrysene*	218-01-9	1.80E-06	5.76E-08	2.52E-07			Yes
Dibenzo(a,h)anthracene*	53-70-3	1.20E-06	3.84E-08	1.68E-07			Yes
Indeno(1,2,3-cd)pyrene*	193-39-5	1.80E-06	5.76E-08	2.52E-07			Yes

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 3

Toxic Air Pollutants Metals [5]	CAS Number	Emission Factor ($lb/10^6$ scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	PTE Emission Rate vs. EL	CAA 112(b) HAP?
Mercury	7439-97-6	2.60E-04	8.32E-06	3.64E-05			Yes
Arsenic	7440-38-2	2.00E-04	6.40E-06	2.80E-05	1.50E-06	**Exceeds**	Yes
Nickel	7440-02-0	2.10E-03	6.72E-05	2.94E-04	2.75E-05	**Exceeds**	Yes
Beryllium	7440-41-7	1.20E-05	3.84E-07	1.68E-06	2.80E-05	Below	Yes
Cadmium	7440-43-9	1.10E-03	3.52E-05	1.54E-04	3.70E-06	**Exceeds**	Yes
Chromium	7440-47-3	1.40E-03	4.48E-05	1.96E-04	3.30E-02	Below	Yes
Cobalt	7440-48-4	8.40E-05	2.69E-06	1.18E-05	3.30E-03	Below	Yes
Manganese	7439-96-5	3.80E-04	1.22E-05	5.34E-05	6.70E-02	Below	Yes
Molybdenum	7439-98-7	1.10E-03	3.52E-05	1.54E-04	3.33E-01	Below	Yes
Selenium	7782-49-2	2.40E-05	7.68E-07	3.36E-06	1.30E-02	Below	Yes
Vanadium	1314-62-1	2.30E-03	7.36E-05	3.22E-04	3.00E-03	Below	No
Zinc	7440-66-6	2.90E-02	9.28E-04	4.06E-03	3.33E-01	Below	No
Barium	7440-39-3	4.40E-03	1.41E-04	6.18E-04	3.30E-02	Below	No
Copper	7440-50-8	8.50E-04	2.72E-05	1.19E-04	1.30E-02	Below	No
		Total Non-Metal HAPs	6.02E-02	2.64E-01			
		Total Metal HAPs	2.13E-04	9.33E-04			
		Total HAPs	0.06	0.26			

Notes:

[1] Criteria Pollutants as stated in Cleaver Brooks Boiler Expected Emission Data for Model CB(LE). PM emission factor is assumed to equal PM10.

[2] Lead Emission factor from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2. Emission factor units is $lb/10^6$ SCF.

[3] Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

[4] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[5] Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4).

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 3

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler 3 Input (SCF/hr)	Boiler 3 Input (SCF/yr)	Boiler 3 Emission Rate[6,7,8] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C	32,019	280,486,440	15287.79
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-02
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-01
CO2e			40 CFR 98 Part A			15,302.78

Notes

[6]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[8]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)

Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 4

Boiler Heat Input (MMBTU/hr)	32.659
Manufacturer	Cleaver Brooks
Model No.	CBLE-700-800
Fuel Type	Natural Gas
Natural Gas Fuel Heat Value (BTU/SCF)	1,020
Natural Gas Use (10^6 scf/hr)	0.0320
Annual Operation (hrs/yr)	8,760

Cleaver Brooks Boiler Expected Emission Data for Model CB(LE)

Criteria Pollutant	Emission Factor[1] (lb/MM Btu)	Emission Rate (lb/hr)	Emission Rate (ton/year)
Total Particulate Matter (PM)	0.010	0.33	1.45
Nitrogen Oxides (NOx)	0.071	2.32	10.16
Sulfur Dioxide (SO_2)	0.0006	0.02	0.09
Carbon Monoxide (CO)	0.036	1.18	5.17
VOC	0.004	0.13	0.57
Lead[2]	5.00E-04	1.60E-05	7.01E-05

PM gr/scf at 3% O2 = PM lb/MMBTU x (20.9-3)/20.9 x 7000 gr/1 lb x 1/f Factor for NG dscf/MMBTU

PM gr/scf at 3% O2 **0.007 gr/dscf**

where:

f factor for NG = 8710 dscf/MMBTU 40 CFR Part 75 specifies a Fd value of 8,710 dscf/mmBtu

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 4

Toxic Air Pollutants Non-metals [3]	CAS No.	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	CAA 112(b) HAP?
Pentane	109-66-0	2.60E+00	8.32E-02	3.64E-01	1.18E+02	Below	No
Benzene	71-43-2	2.10E-03	6.72E-05	2.94E-04	8.00E-04	Below	Yes
3-Methylchloranthrene	56-49-5	1.80E-06	5.76E-08	2.52E-07	2.50E-06	Below	Yes
Benzo(a)pyrene*	50-32-8	1.20E-06	3.84E-08	1.68E-07	2.00E-06	Below	Yes
Formaldehyde	50-00-0	7.50E-02	2.40E-03	1.05E-02	5.10E-04	**Exceeds**	Yes
POM (7-PAH)[4]			3.65E-07	1.60E-06	2.00E-06	Below	Yes
Hexane	110-54-3	1.80E+00	5.76E-02	2.52E-01	1.20E+01	Below	Yes
Naphthalene	91-20-3	6.10E-04	1.95E-05	8.54E-05	9.10E-05	Below	Yes
Toluene	108-88-3	3.40E-03	1.09E-04	4.77E-04	2.50E+01	Below	Yes
2-Methylnapthalene	97-57-6	2.40E-05	7.68E-07	3.36E-06			Yes
7, 12 - Dimethylbenz(a)anthracene		1.60E-05	5.12E-07	2.24E-06			Yes
Acenaphthene	83-32-9	1.80E-06	5.76E-08	2.52E-07			Yes
Acenaphyhylene	203-96-8	1.80E-06	5.76E-08	2.52E-07			Yes
Anthracene	120-12-7	2.40E-06	7.68E-08	3.36E-07			Yes
Dichlorobenzene	25321-22-6	1.20E-03	3.84E-05	1.68E-04			Yes
Flouranthene	206-44-0	3.00E-06	9.60E-08	4.20E-07			Yes
Fluorene	86-73-7	2.80E-06	8.96E-08	3.92E-07			Yes
Phenanthrene	85-01-8	1.70E-05	5.44E-07	2.38E-06			Yes
Benzo(a)anthracene*	56-55-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(b)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(g,h,i)perylene	191-24-2	1.20E-06	3.84E-08	1.68E-07			Yes
Benzo(k)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Chrysene*	218-01-9	1.80E-06	5.76E-08	2.52E-07			Yes
Dibenzo(a,h)anthracene*	53-70-3	1.20E-06	3.84E-08	1.68E-07			Yes
Indeno(1,2,3-cd)pyrene*	193-39-5	1.80E-06	5.76E-08	2.52E-07			Yes

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 4

Toxic Air Pollutants Metals [5]	CAS Number	Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	PTE Emission Rate vs. EL	CAA 112(b) HAP?
Mercury	7439-97-6	2.60E-04	8.32E-06	3.64E-05			Yes
Arsenic	7440-38-2	2.00E-04	6.40E-06	2.80E-05	1.50E-06	**Exceeds**	Yes
Nickel	7440-02-0	2.10E-03	6.72E-05	2.94E-04	2.75E-05	**Exceeds**	Yes
Beryllium	7440-41-7	1.20E-05	3.84E-07	1.68E-06	2.80E-05	Below	Yes
Cadmium	7440-43-9	1.10E-03	3.52E-05	1.54E-04	3.70E-06	**Exceeds**	Yes
Chromium	7440-47-3	1.40E-03	4.48E-05	1.96E-04	3.30E-02	Below	Yes
Cobalt	7440-48-4	8.40E-05	2.69E-06	1.18E-05	3.30E-03	Below	Yes
Manganese	7439-96-5	3.80E-04	1.22E-05	5.34E-05	6.70E-02	Below	Yes
Molybdenum	7439-98-7	1.10E-03	3.52E-05	1.54E-04	3.33E-01	Below	Yes
Selenium	7782-49-2	2.40E-05	7.68E-07	3.36E-06	1.30E-02	Below	Yes
Vanadium	1314-62-1	2.30E-03	7.36E-05	3.22E-04	3.00E-03	Below	No
Zinc	7440-66-6	2.90E-02	9.28E-04	4.06E-03	3.33E-01	Below	No
Barium	7440-39-3	4.40E-03	1.41E-04	6.18E-04	3.30E-02	Below	No
Copper	7440-50-8	8.50E-04	2.72E-05	1.19E-04	1.30E-02	Below	No
		Total Non-Metal HAPs	6.02E-02	2.64E-01			
		Total Metal HAPs	2.13E-04	9.33E-04			
		Total HAPs	0.06	0.26			

Notes:

[1] Criteria Pollutants as stated in Cleaver Brooks Boiler Expected Emission Data for Model CB(LE). PM emission factor is assumed to equal PM10.

[2] Lead Emission factor from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2. Emission factor units is lb/10^6 SCF.

[3] Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

[4] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[5] Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4).

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 4

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler 4 Input (SCF/hr)	Boiler 4 Input (SCF/yr)	Boiler 4 Emission Rate[6,7,8] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C	32,019	280,486,440	15287.79
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-02
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-01
CO2e			40 CFR 98 Part A			15,302.78

Notes

[6]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[8]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)

Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 5

Boiler Heat Input (MMBTU/hr)	32.659
Manufacturer	Cleaver Brooks
Model No.	CBLE-700-800
Fuel Type	Natural Gas
Natural Gas Fuel Heat Value (BTU/SCF)	1,020
Natural Gas Use (10^6 scf/hr)	0.0320
Annual Operation (hrs/yr)	8,760

Cleaver Brooks Boiler Expected Emission Data for Model CB(LE)

Criteria Pollutant	Emission Factor[1] (lb/MM Btu)	Emission Rate (lb/hr)	Emission Rate (ton/year)
Total Particulate Matter (PM)	0.010	0.33	1.45
Nitrogen Oxides (NOx)	0.071	2.32	10.16
Sulfur Dioxide (SO_2)	0.0006	0.02	0.09
Carbon Monoxide (CO)	0.036	1.18	5.17
VOC	0.004	0.13	0.57
Lead[2]	5.00E-04	1.60E-05	7.01E-05

PM gr/scf at 3% O2 = PM lb/MMBTU x (20.9-3)/20.9 x 7000 gr/1 lb x 1/f Factor for NG dscf/MMBTU

PM gr/scf at 3% O2 **0.007 gr/dscf**

where:

f factor for NG = 8710 dscf/MMBTU 40 CFR Part 75 specifies a Fd value of 8,710 dscf/mmBtu

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 5

Toxic Air Pollutants Non-metals [3]	CAS No.	EPA AP-42 Natural Gas Emission Factor (lb/10^6 scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	Emission Rate vs. EL	CAA 112(b) HAP?
Pentane	109-66-0	2.60E+00	8.32E-02	3.64E-01	1.18E+02	Below	No
Benzene	71-43-2	2.10E-03	6.72E-05	2.94E-04	8.00E-04	Below	Yes
3-Methylchloranthrene	56-49-5	1.80E-06	5.76E-08	2.52E-07	2.50E-06	Below	Yes
Benzo(a)pyrene*	50-32-8	1.20E-06	3.84E-08	1.68E-07	2.00E-06	Below	Yes
Formaldehyde	50-00-0	7.50E-02	2.40E-03	1.05E-02	5.10E-04	**Exceeds**	Yes
POM (7-PAH)[4]			3.65E-07	1.60E-06	2.00E-06	Below	Yes
Hexane	110-54-3	1.80E+00	5.76E-02	2.52E-01	1.20E+01	Below	Yes
Naphthalene	91-20-3	6.10E-04	1.95E-05	8.54E-05	9.10E-05	Below	Yes
Toluene	108-88-3	3.40E-03	1.09E-04	4.77E-04	2.50E+01	Below	Yes
2-Methylnapthalene	97-57-6	2.40E-05	7.68E-07	3.36E-06			Yes
7, 12 - Dimethylbenz(a)anthracene		1.60E-05	5.12E-07	2.24E-06			Yes
Acenaphthene	83-32-9	1.80E-06	5.76E-08	2.52E-07			Yes
Acenaphyhylene	203-96-8	1.80E-06	5.76E-08	2.52E-07			Yes
Anthracene	120-12-7	2.40E-06	7.68E-08	3.36E-07			Yes
Dichlorobenzene	25321-22-6	1.20E-03	3.84E-05	1.68E-04			Yes
Flouranthene	206-44-0	3.00E-06	9.60E-08	4.20E-07			Yes
Fluorene	86-73-7	2.80E-06	8.96E-08	3.92E-07			Yes
Phenanthrene	85-01-8	1.70E-05	5.44E-07	2.38E-06			Yes
Benzo(a)anthracene*	56-55-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(b)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Benzo(g,h,i)perylene	191-24-2	1.20E-06	3.84E-08	1.68E-07			Yes
Benzo(k)fluoranthene*	205-82-3	1.80E-06	5.76E-08	2.52E-07			Yes
Chrysene*	218-01-9	1.80E-06	5.76E-08	2.52E-07			Yes
Dibenzo(a,h)anthracene*	53-70-3	1.20E-06	3.84E-08	1.68E-07			Yes
Indeno(1,2,3-cd)pyrene*	193-39-5	1.80E-06	5.76E-08	2.52E-07			Yes

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 5

Toxic Air Pollutants Metals [5]	CAS Number	Emission Factor ($lb/10^6$ scf)	Emission Rate (lb/hr)	Emission Rate (ton/year)	IDAPA 58.01.01.585/586 EL (lb/hr)	PTE Emission Rate vs. EL	CAA 112(b) HAP?
Mercury	7439-97-6	2.60E-04	8.32E-06	3.64E-05			Yes
Arsenic	7440-38-2	2.00E-04	6.40E-06	2.80E-05	1.50E-06	**Exceeds**	Yes
Nickel	7440-02-0	2.10E-03	6.72E-05	2.94E-04	2.75E-05	**Exceeds**	Yes
Beryllium	7440-41-7	1.20E-05	3.84E-07	1.68E-06	2.80E-05	Below	Yes
Cadmium	7440-43-9	1.10E-03	3.52E-05	1.54E-04	3.70E-06	**Exceeds**	Yes
Chromium	7440-47-3	1.40E-03	4.48E-05	1.96E-04	3.30E-02	Below	Yes
Cobalt	7440-48-4	8.40E-05	2.69E-06	1.18E-05	3.30E-03	Below	Yes
Manganese	7439-96-5	3.80E-04	1.22E-05	5.34E-05	6.70E-02	Below	Yes
Molybdenum	7439-98-7	1.10E-03	3.52E-05	1.54E-04	3.33E-01	Below	Yes
Selenium	7782-49-2	2.40E-05	7.68E-07	3.36E-06	1.30E-02	Below	Yes
Vanadium	1314-62-1	2.30E-03	7.36E-05	3.22E-04	3.00E-03	Below	No
Zinc	7440-66-6	2.90E-02	9.28E-04	4.06E-03	3.33E-01	Below	No
Barium	7440-39-3	4.40E-03	1.41E-04	6.18E-04	3.30E-02	Below	No
Copper	7440-50-8	8.50E-04	2.72E-05	1.19E-04	1.30E-02	Below	No
		Total Non-Metal HAPs	6.02E-02	2.64E-01			
		Total Metal HAPs	2.13E-04	9.33E-04			
		Total HAPs	0.06	0.26			

Notes:

[1] Criteria Pollutants as stated in Cleaver Brooks Boiler Expected Emission Data for Model CB(LE). PM emission factor is assumed to equal PM10.

[2] Lead Emission factor from EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-2. Emission factor units is $lb/10^6$ SCF.

[3] Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

[4] Polycyclic Organic Matter (POM) is considered as one TAP consisting of benzo(a)pyrene, benzo(a)anthracene, benzo(b)flouranthene, dibenzo(a,h)anthracene, chrysene, indenol(1,2,3,-cd)pyrene, and benzo(a)pyrene. Compounds constituting POM are designated as *.

[5] Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4).

AgroFarma Twin Falls - Chobani Facility Emissions Estimate

Natural Gas Boiler 5

Green House Gases	EF (Natural Gas) kg/MMBtu	HHV	Reference	Boiler 5 Input (SCF/hr)	Boiler 5 Input (SCF/yr)	Boiler 5 Emission Rate[6,7,8] (metric ton/yr)
CO_2	53.02	1.028E-03	40 CFR 98 Subpart C	32,019	280,486,440	15287.79
N_2O	1.0E-04	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-02
CH_4	1.0E-03	1.028E-03	40 CFR 98 Subpart C Equation C-8 (Tiers 1 & 3)	32,019	280,486,440	2.883E-01
CO2e			40 CFR 98 Part A			15,302.78

Notes

[6]Eqn C-1: $CO_2 = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C-1 of 40 CFR Part 98 Subpart C (kg CO_2/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[7]Eqn C-8: CH_4 or $N_2O = 1 \times 10^{-3} \times Fuel \times HHV \times EF$

Fuel = Volume of fuel combusted per year, (SCF/Year)

EF = Fuel-specific default CH_4 or N_2O emission factor for natural gas, from Table C-2 of 40 CFR Part 98 Subpart C (kg CH_4 or N_2O/MMBTU)

HHV = Default high heat value of the fuel, from Table C-1 of 40 CFR Part 98 Subpart C (MMBTU/SCF)

1×10^{-3} = Conversion Factor from Kilograms to Metric Tons

[8]CO_2e = (GWP CO_2 x CO_2 metric ton/yr) + (GWP CH4 x CH4 metric ton/yr) + (GWP N_2O x N_2O metric ton/yr)

Global Warming Potential (GWP) for Selected GHG - 40 CFR 98 Subpart A, Table A-1

GWP CO_2 =	1.00
GWP CH_4 =	21.00
GWP N_2O =	310.00

AgroFarma Twin Falls - Chobani Facilty Emissions Estimate

Anhydrous Ammonia Refrigeration System

Anhydrous Ammonia Refrigeration System (11 Chillers)	Capacity (lb/hr)	Emission Rate[1] (lb emitted/SCC unit)	Ammonia Emissions (lb/hr)	IDAPA 58.01.01.585/586 TAP Screening Levels (lb/hr)	Estimated Emissions Exceed TAP Screening Levels (Yes/No)
Chillers	14,850	0.30	2.23		
Total Emissions			2.23	1.20	Yes

Notes:

[1] Emission rates derived from AP-42, Section 9, Development and Selection of Ammonia Emission Factors, Table 7.3, low density prill coolers. Emission factors represent the combined refrigerant loss types of intial, operating, intermittent, and disposal. SCC unit refers to tons produced.

AgroFarma Twin Falls - Chobani Facility Emissions Estimate
Cooling Tower

Cooling Tower Parameters

Number of One Cell Towers[1]	12
Total Water Flow Rate (gal/min)[1]	34,140
Flow of cooling water (lbs/hr)	17,083,656
TDS of blowdown (mg/l or ppmw)[1]	1,500
Flow of dissolved solids (lbs/hr)	25,625
Fraction of flow producing PM_{10} drift[2]	0.300
Control efficiency of drift eliminators (gal drift/gal flow)[1]	0.00005
Number of cells per tower (outlet fans)[1]	1
Height at cell release (ft)[1]	77
Discharge flow per cell (ACFM)[1]	314,078
Diameter of each cell (ft)[1]	13
Area of cell discharge (ft^2)[1]	139.6
Average Temperature of cell discharge (degF)[1]	80.3
Exit Velocity (ft/s):	37.50

Cooling Tower Emissions

PM Emissions (lb/hr)	PM Emissions (ton/yr)	PM_{10} Emissions (lb/hr)	PM_{10} Emissions (ton/yr)	$PM_{2.5}$ Emissions (lb/hr)[3]	$PM_{2.5}$ Emissions (ton/yr)[3]
1.28	5.61	0.38	1.66	0.38	1.66

PM-10 Emissions from Each Cooling Tower (lb/hr) 0.03

Notes:
Emission Calculation Method from AP 42, Sect.13.4-1

[1] As provided in the Environmental Permitting Data, Shambaugh & Son Job 170993, 12/192011 (attachment to email from Matt Meier/MSKTD & Associates on December 20,2011)

[2] From "Calculating Realistic PM_{10} Emissions From Cooling Towers" (J. Reisman, G. Frisbie). Presented at 2001 AWMA Annual Meeting.

[3] Assumes that $PM_{2.5}$ emissions are equal to PM_{10} emissions.

Appendix E

Manufacturer Data

Cleaver-Brooks Boiler Expected Emission Data

Producing Steam Firing — **Nat Gas**

BACKGROUND INFORMATION

Date	12/06/11	Boiler Model	CB(LE)
Author	L.C. Banks	Altitude (feet)	4100
Customer	Chobani Yogurt	Operating Pressure (p	125.00
City & State	Twin Falls , IN.	Furnace Volume (cuft)	230.17
		Furnace Heat Release (btu/hr/cu ft)	141,891
		Heating Surface (sqft)	3,500
		Nox System	60

Nat Gas		Firing Rate			
		25%	50%	75%	100%
Horsepower		200	400	600	800
Input , Btu/hr		8,165,000	16,329,000	24,494,000	32,659,000
CO	ppm	150	50	50	50
	lb/MMBtu	0.109	0.036	0.036	0.036
	lb/hr	0.89	0.60	0.89	1.19
	tpy	3.92	2.61	3.92	5.22
NOx	ppm	60	60	60	60
	lb/MMBtu	0.071	0.071	0.071	0.071
	lb/hr	0.58	1.15	1.73	2.31
	tpy	2.52	5.05	7.57	10.10
SOx	ppm	0.36	0.36	0.36	0.36
	lb/MMBtu	0.0006	0.0006	0.0006	0.0006
	lb/hr	0.0049	0.0098	0.0147	0.0196
	tpy	0.02	0.04	0.06	0.09
HC/VOCs	ppm	10	10	10	10
	lb/MMBtu	0.004	0.004	0.004	0.004
	lb/hr	0.033	0.065	0.098	0.131
	tpy	0.14	0.29	0.43	0.57
PM(Filterabe)	ppm	N/A	N/A	N/A	N/A
EPA Method 5	lb/MMBtu	0.010	0.010	0.010	0.010
	lb/hr	0.082	0.163	0.245	0.327
	tpy	0.36	0.72	1.07	1.43
Exhaust Data					
Temperature, F		365	375	380	390
Flow	ACFM	2,828	5,727	8,643	11,664
	SCFM (70 Degrees Fah.)	1,602	3,203	4,805	6,406
	DCFM	1,422	2,844	4,266	5,688
	lb/hr	7,207	14,414	21,621	28,828
Velocity	ft/sec	15.00	30.38	45.85	61.88
	ft/min	900	1,823	2,751	3,713

Notes:

1) All ppm levels are corrected to dry at 3% oxygen.
2) Emission data based on 82% boiler efficiency.
3) % H2O , by volume in exhaust gas is **17.24** % O2, by volume **2.47**
4) Water vapor in exhaust gas is **98.91** lbs/MMBtu of fuel fired
5) CO_2 produced is **116.31** lbs/MMBtu of fuel fired
6) Particulate is exclusive of any particulates in combustion air or other sources of residual particulates from material. PM level indicated on this form is based on combustion air and fuel being clean and turndown up to 4:1 above 40 hp.
7) Heat input is based on high heating value (HHV).
8.) Emission produced in tons per year (tpy) is based on 24 hours per day for 365 days = 8,760 hours per ye

Environmental Permitting Data
Agro-Farma, Twin Falls, Idaho

Shambaugh & Son Job 170993
12/19/2011

The following data items are in response to, and in order of the data requested in Rick McCormick's email dated 12/2/2011.

Item 1 - Drawings

Item 2 - Stack Parameters
See Item 3 below.

Item 3 - Combustion Equipment

TAG	Source	Schedule	Manufacturer	Model	Drawings	Stack Height From Ground (ft)	Stack Diameter (in)	Stack Flow (lb/hr)	Stack Temp. (degF)	BTU Input (Btu/hr)	Emissions Data
01	Boiler 1	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
02	Boiler 2	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
03	Boiler 3	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
04	Boiler 4	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
05	Boiler 5	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
06	Boiler 6	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
07	Boiler 7	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
08	Boiler 8	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
09	Boiler 9	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
10	Boiler 10	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
11	Boiler Room MAU (50,000 cfm, direct fired)	Phase 1	Rupp Air	RAM 225		none	none	none	none	3,586,957	N/A
12	Boiler Room MAU (50,000 cfm, direct fired)	Phase 2	Rupp Air	RAM 225		none	none	none	none	3,586,957	N/A
13	Main Office RTU 1 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
14	Main Office RTU 2 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
15	Main Office RTU 3 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
16	Main Office RTU 4 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
17	Main Office RTU 5 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
18	Main Office RTU 6 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
19	Lab MAU (6,000 cfm, indirect fired roof top unit)	Phase 1	Aaon	RN-050		N/A	N/A	N/A	N/A	810,000	N/A
20	Meeting/RR/Plant Offices/Maintenance Office RTU (indirect fired roof top unit)	Phase 1	Carrier	48A5,S,020		N/A	N/A	N/A	N/A	350,000	N/A
21	Maintenance/Parts/Fab RTU (indirect fired roof top unit)	Phase 1	Carrier	48A5,S,060		N/A	N/A	N/A	N/A	1,164,000	N/A
22	Battery MAU (42,000 cfm, direct fired)	Phase 1	Rupp Air	RAM 222		none	none	none	none	3,586,957	N/A
23	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
24	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
25	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
26	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
27	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
28	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
29	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
30	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
31	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
32	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
33	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
34	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A

Item 4 - Ammonia Charge
Phase 1 total approximate is 10,800 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 8 chillers)
Additional Phase 2 total approximate is 4,020 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 3 chillers)
Total approximate is 14,850 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 11 chillers)

Item 5 - Cooling Tower Data

	Phase 1	Additional Phase 2	Total Phase 1 + Phase 2
Number of Tower Cells	8	4	
Average Water Flow Rate per Cell (gal/min)	2,796	2,944	2,845
Total Water Flow Rate (gal/min)	22,365	11,775	34,140
TDS of blowdown (mg/l or ppmw)	1500	1500	1500
Control efficiency of drift eliminators (gal. drift/gal. flow)	0.00005	0.00005	0.00005
Other Parameters			
Number of cells per tower (outlet fans)	1	1	1
Height at cell release (ft):	77	77	77
Discharge flow per cell (ACFM):	314,078	314,078	314,078
Diameter of each cell (ft):	13	13	13
Area of cell discharge (ft2):	139.6	139.6	139.6
Average Temperature of cell discharge (degF):	80.3	80.3	80.3

Appendix F

Air Dispersion Modeling Protocol with Approval Letter

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON, BOISE, ID 83706 · (208) 373-0502

C. L. "BUTCH" OTTER, GOVERNOR
TONI HARDESTY, DIRECTOR

January 12, 2012

VIA EMAIL

Rick McCormick, P.E.
Project Engineer
CH2M HILL
Boise, Idaho 83702

RE: Modeling Protocol Approval for the 15-Day Pre-Permit to Construct Application for the Agro Farma Dairy Processing Facility in Twin Falls, Idaho

Dear Mr. McCormick:

DEQ received a dispersion modeling protocol from you, on behalf of Agro Farma Inc. (also referred to as Chobani), on December 28, 2011. Additional clarification, site map, and project definition submittals supporting the modeling protocol were received by DEQ via email on January 4, 5, 9, and 10, 2012. The modeling protocol proposes methods and data for use in Class II area ambient air impact analyses in support of a 15-Day Pre-Permit Construction Authorization Permit to Construct application for a dairy processing facility that will produce yogurt products at the facility in Twin Falls, Idaho.

The modeling protocol has been reviewed and DEQ has the following comments:

- **Comment 1: Equipment Listing.** This protocol approval is based on the following emissions sources and fuel types for Phase I for the Agro Farma facility:
    - Five boilers each with a rated heat input capacity of 32.7 million Btu/hr fired on natural gas;
    - Ten rooftop-mounted air makeup units fired on natural gas;
    - Eight infrared heaters fired on natural gas;
    - One cooling tower equipped with eight cells; and,
    - An anhydrous ammonia refrigeration system.

- **National Ambient Air Quality Standards.** Modeling will not be required to demonstrate compliance with the 1-hour and 3-hour average sulfur dioxide; the 1-hour average carbon monoxide, and the 3-month rolling average lead National Ambient Air Quality Standards (NAAQS). Potential emission rates for the Phase 1 project presented in your final modeling protocol emission inventory were below Idaho DEQ's Level I modeling thresholds.

- **Comment 3: Background Concentrations.** In the event the project's requested potential emissions cause ambient impacts that exceed an applicable significant contribution level a cumulative impact analysis will be required for that pollutant. DEQ's recommended ambient background concentrations follow:

    - PM_{10}: 52 $\mu g/m^3$, 24-hour average, 6th highest value.

The PM_{10} background value was based on five years of Twin Falls monitoring data spanning 1998 through 2002.

- $PM_{2.5}$: 21.3 $\mu g/m^3$, 24-hour average, based on the three year average of the 98th percentile values.

  7.2 $\mu g/m^3$, annual average, based on the 3-year average of the annual mean value.

The $PM_{2.5}$ background concentrations were based on Twin Falls monitoring data collected from 2000 through 2002.

The determination of the 1-hour and annual NO_2 background concentrations is affected by the lack of local ambient monitoring in the Twin Falls area. Idaho DEQ has adopted the EPA interim SIL of 7.5 $\mu g/m^3$, 1-hour average, for use in 1-hour NO_2 significant impact analyses. For Tier I and Tier II compliance options for the conversion of NO_x to NO_2, DEQ requests that Agro Farma use an ambient background value of 81.5 $\mu g/m^3$, 1-hour average, based on the 3-year average of 2009, 2010, and 2011 98th percentile values of NO_2 monitoring data at the Meridian site.

In the event a Tier 3 compliance method is used for the 1-hour average NO_2 standard modeling demonstration, the figure included in Attachment 1 to this letter contains a daily set of hourly ozone and NO_2 ambient background concentrations for the analyses.

Agro Farma's facility will be located on the edge of Twin Falls and is surrounded primarily by a mixture of agricultural land and light industry. An appropriate application of the default background concentrations for this project is an average value of the default small town/suburban background value of 32 $\mu g/m^3$, annual average, and the default rural agricultural background of 17 $\mu g/m^3$, annual average. The recommended background value for NO_2 is 24.5 $\mu g/m^3$, annual average.

DEQ has identified The Amalgamated Sugar Company (TASCO) facility as a nearby facility that must be included in the cumulative NO_2 impact analyses for those receptors where maximum impacts exceed the 1-hour and/or annual NO_2 significant impact level(s) (SIL). DEQ will provide the electronic modeling setup files used by the TASCO Twin Falls facility for a past project which can be modified for Agro Farma's NO_2 modeling demonstration. The model setup used the NAD27 datum. If a Tier 3 compliance method is used for a 1-hour average NO_2 NAAQS demonstration the current default in-stack NO_2 to NO_x ratio of 0.5 should be used unless an alternative source-specific value is supported and adequately documented in the permit application.

The primary NO_x sources and the potential emission rates at the TASCO facility for a nearby source analysis include the following:

- PB1 (Foster Wheeler Boiler): 200 pounds per hour (lb/hr) total NO_x;
- PB2 (Babcock and Wilcox Boiler): 220 lb/hr total NO_x;
- PB3 (Keeler Boiler): 27.84 lb/hr total NO_x; and,
- PD1A (Pulp Dryer): 45 lb/hr total NO_x.

The modeling input file includes a monthly operation factors to reflect the operating schedule of the Keeler Boiler (PB3) and the Pulp Dryer (PD1A) for the facility's typical annual operating schedule.

- **Comment 3: Justification of Release Parameters.** Documentation and justification of release parameters must be provided in the application. In most instances, typical values should be used rather than extreme values, and should represent the conditions at the point of release to the atmosphere. Conservative assumed values may be used where supporting documentation is unavailable. Documentation can include manufacturer's specifications sheets or design documents. The application's modeling report should confirm that the orientation of each of the point sources is vertical and uninterrupted, rather than a horizontal release or impeded by a raincap or similar feature.

  Provide the assumptions and calculations that were used to calculate any area or volume source parameters in addition to the point source parameter justifications.

  The protocol indicated that the rooftop air makeup unit vents were to be modeled as volume sources. DEQ recommends modeling rooftop vents as point sources with release parameters that are appropriate for the design of the vent. The use of the Beta version of AERMOD is approved by DEQ for $PM_{2.5}$ and PM_{10} minor source modeling demonstrations for point sources modeled as capped or horizontal releases for this project.

- **Comment 4: Agro Farma and Wastewater Pre-Treatment Facility.** DEQ has concurred with Agro Farma's determination that the yogurt production facility, which will be owned and operated by Agro Farma, and the Wastewater Pre-Treatment (WWPT) facility, which will be owned and operate by the City of Twin Falls, will be two separate facilities for permitting purposes. The WWPT facility has not been constructed at this time and will not be considered as a "nearby" source for the Agro Farma's NAAQS compliance demonstrations for this project.

- **Comment 5: Receptor Grid.** The receptor grid proposed appears to be capable of resolving the maximum ambient concentrations. However, if DEQ performs a sensitivity analysis using a denser receptor grid and any applicable ambient standards are exceeded, the permit will be denied.

- **Comment 6: Emission Inventory.** The permit engineer for this project will review the emission estimates for this project after the official PTC package is received.

- **Comment 7: DEQ Application Forms.** Please complete all modeling information application forms for this permit application package. Modeling forms include an emission inventory specifically for the modeling demonstration.

- **Comment 8: Ambient Air Boundary.** The methods that will be used to preclude public access to the area being claimed as exempt from ambient air appear to meet the requirements of DEQ's Air Quality Modeling Guideline. The posting of no trespassing signage along the ambient air boundary where no fence or building exists is an adequate control method. Additional receptors are to be placed along the canal at regular intervals at all locations where the Twin Falls Canal Company accesses the canal for inspections and maintenance.

DEQ's modeling staff considers the submitted dispersion modeling protocol, with resolution of the additional items noted above, to be approved. It should be noted, however, that the approval of the modeling protocol is not meant to imply approval of completed dispersion modeling analyses. Please refer to the *State of Idaho Air Quality Modeling Guideline*, which is available on the Internet at http://www.deq.idaho.gov/media/355037-modeling-guideline.pdf for further guidance.

To ensure a complete and timely review of any analyses submitted to the Idaho Department of Environmental Quality, our modeling staff requests that electronic copies of all modeling input and output files (including BPIP and AERMAP input and output files) be submitted with analyses reports. Also, please include a copy of the protocol and this approval notice with the submitted application. If you have any further questions or comments, please contact me at (208) 373-0536.

Sincerely,

Darrin Mehr

Darrin Mehr
Air Quality Analyst
Monitoring, Modeling, and Emission Inventories
Air Quality Stationary Source Program

Enclosure: Electronic Modeling Input Files for TASCO Twin Falls Facility (Generic .DTA input and BPIP)

Attachment 1

NO_2 and Ozone Background Concentrations

Idaho DEQ Default NO_2 and Ozone Data for PVMRM or OLM analyses for NOx Ambient Impacts

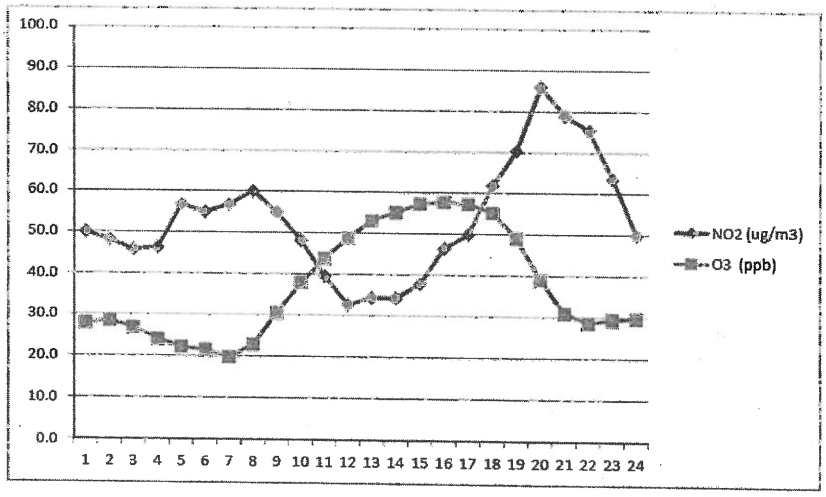
Questions: Contact Kevin Schilling, kevin.schilling@deq.idaho.gov Issue Date: June 16, 2011

PLEASE DO NOT USE THESE DATA FOR PERMITTING ANALYSES WITHOUT PRIOR APPROVAL FROM DEQ

Hour by hour background NO2 data were based on monitoring data collected between June 2009 and June 2010 in Meridian Idaho. A separate background value was generated for each hour of the day, based on the 2nd highest value monitored for that hour in the 1-year dataset.

Hourly ozone data were taken from the 2007 study, Ozone and its Precursors in the Treasure Valley, Idaho (final report, may 2008, Desert Research Institute). Hourly data were collected from Parma Idaho from June 27, 2007 through October 12, 2007. These data were sorted by hour and then the mean and the standard deviation was calculated for each hour across all days. For each hour modeled, a background ozone value equal to the mean plus one standard deviation was generated.

Hour	NO_2 (ug/m3)	O_3 (ppb)
1	50.0	27.9
2	48.1	28.5
3	45.7	26.8
4	46.2	24.1
5	56.7	22.1
6	54.9	21.4
7	56.7	19.7
8	60.1	22.8
9	54.9	30.5
10	48.1	37.8
11	39.5	43.8
12	32.6	48.8
13	34.3	53.0
14	34.3	55.0
15	37.8	57.1
16	46.4	57.6
17	49.8	57.1
18	61.8	55.1
19	70.4	49.0
20	85.9	39.0
21	79.0	30.9
22	75.5	28.5
23	63.5	29.4
24	49.8	29.6



Air Dispersion Modeling Protocol
Agro Farma Dairy Processing Facility
Twin Falls, Idaho

Prepared for
Agro Farma, Inc.

Submitted to
Idaho Department of Environmental Quality

December 2011

CH2MHILL®

Air Dispersion Modeling Protocol

Project Background

On behalf of Agro Farma, Inc., CH2M HILL, Inc. is preparing a minor source air quality Pre-Construction Permit application for a new dairy processing facility to be located in Twin Falls, Idaho. The new facility will consist of nine 3.2659 MMBTU/hr natural gas boilers, four make-up air unit (MAU) heaters, eight roof top unit (RTU) heaters, eight infrared heaters (IRH), one 16,500 lb anhydrous ammonia refrigeration system containing 11 chillers, and a cooling tower with 12 tower cells. The Pre-Construction Permit limits a new facility's potential to emit (PTE) to below major source thresholds in accordance with Rules for the Control of Air Pollution in Idaho, IDAPA.58.01.01.213.

Facility Description

The Agro Farma Twin Falls facility is a new dairy processing facility. The nine-3.2659 natural gas boilers emission rates were supplied by the manufacturer, Cleaver Brooks, for a 60 parts per million (ppm) model CBLE 700-800 natural gas boiler. The four MAU heaters, eight RTU heaters, eight IRHs, the anhydrous ammonia refrigeration system, and the cooling tower emission rates were obtained from the United States Environmental Protection Agency (US EPA) Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Fifth Addition (AP-42). The PTE for each emission unit was based on an 8,760 hours per year operation schedule.

Source Description

Point Sources

Nine boiler stacks and twelve cooling tower cells will be represented as point sources. The release parameters for each source type are shown in Table 1. A stack location plan is included as Figure 1. A complete table of each modeled source is included in Appendix A.

TABLE 1
Point Source Stack Parameters

Source Type	Number of Sources	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)
Natural Gas Boiler Stack	9	15.85	472	18.86[a]	0.61
Cooling Tower Cells	12	23.47	300	11.43[b]	3.96

[a] Velocity based on flow rate of 6,406 scfm (based on Cleaver Brooks Emissions Data – Appendix B)
[b] Velocity based on flow rate of 314,078 acfm (based on Agro Farma Emissions Data prepared by Shambaugh and Son – Appendix C)

Volume Sources

The facility includes a number of roof top heaters. These sources will be represented as volume sources using the procedures outlined in the AERMOD users guide for determining release parameters. The release height is the height of the building on which the source is located. The initial lateral dimension for a single volume source is the length of side divided by 4.3. The initial vertical dimension for an elevated source on a building is the building height divided by 2.15. The release parameters for each source type are shown in Table 2. A complete table of each modeled source is included at the end of the modeling protocol.

TABLE 2
Volume Source Release Parameters

Source Type	Number of Sources	Release Height[a] (meters)	Initial Horizontal Dimension[b] (meters)	Initial Vertical Dimension[c] (meters)
Make up air unit	4	13.72	0.024	6.38
Roof top unit	8	13.72	0.024	6.38
Receiving bay infra red heater	8	13.72	0.024	6.38

[a] Release height based on building height of 13.72 meters
[b] Initial horizontal dimension based on 4-inch opening divided by 4.3
[c] Initial vertical dimension based on building height of 13.72 meters divided by 2.15

Estimated Emissions

Pollutant emissions were estimated based on manufacturer data for the boilers and AP-42 emission factors for all other sources. Every source is assumed to operate 8,760 hours per year.

Criteria Pollutants

Criteria pollutant emissions are presented in Table 3. Table 4 provides a summary of the pollutant cases that require modeling based on the current IDEQ Modeling Threshold Values for Level II Sources in Idaho. Table 4 demonstrates that dispersion modeling will not be required for CO, lead, or annual SO2.

TABLE 4
Emission Rates and Modeling Thresholds

Pollutant	Averaging Period	Facility Total Emission Rate	IDEQ Modeling Threshold[a]	Modeling Required
PM10	24-hour	3.50 lb/hr	2.6 lb/hr	Yes
PM2.5	24-hour	3.50 lb/hr	0.63 lb/hr	Yes
	Annual	15.39 tpy	4.1 tpy	Yes
CO	1-hour, 8-hour	12.12 lb/hr	175 lb/hr (15 lb/hr)	No
NO2	1-hour	22.61 lb/hr	2.4 lb/hr	Yes
	Annual	99.03 tpy	14 tpy	Yes
SO2	1-hour	0.19 lb/hr	2.5 lb/hr (0.21 lb/hr)	Yes[b]
	Annual	0.86 tpy	14 tpy (1.2 tpy)	No
Lead	3-month rolling average	1.53E-04 lb/hr[c]	14 lb/month	No

[a] Criteria pollutants from Level II sources may be evaluated on a case by case basis. Values in parenthesis represent Level 1 sources.
[b] Even though the threshold level for annual emissions is not exceeded for this case, IDEQ requires modeling of all averaging periods for that pollutant if the threshold is exceeded for any averaging period for that pollutant.
[c] Equivalent to approximately 0.11 lb/month

TABLE 3
Criteria Pollutant Emissions

Source Name	Description	PM10 lb/hr	PM10 ton/year	PM2.5 lb/hr	PM2.5 tpy	NOX lb/hr	NOX tpy	SO2 lb/hr	SO2 tpy	CO lb/hr	CO tpy	VOC lb/hr	VOC tpy	Lead lb/hr	Lead tpy
BOILER1	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER2	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER3	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER4	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER5	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER6	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER7	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER8	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BOILER9	Boiler	0.33	1.45	0.33	1.45	2.32	10.16	0.02	0.09	1.18	5.17	0.13	0.57	1.60E-05	7.01E-05
BRMAU1	Makeup air unit	0.03	0.13	0.03	0.13	0.35	1.53	2.11E-03	0.01	0.30	1.31	0.02	0.09	1.76E-06	7.71E-06
BRMAU2	Makeup air unit	0.03	0.13	0.03	0.13	0.35	1.53	2.11E-03	0.01	0.30	1.31	0.02	0.09	1.76E-06	7.71E-06
LABMAU	Makeup air unit	0.01	0.04	0.01	0.04	0.08	0.35	4.76E-04	2.08E-03	0.07	0.31	4.37E-03	0.02	3.97E-07	1.74E-06
BATTMAU	Makeup air unit	0.03	0.13	0.03	0.13	0.35	1.53	2.11E-03	0.01	0.30	1.31	0.02	0.09	1.76E-06	7.71E-06
RTU1	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
RTU2	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
RTU3	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
RTU4	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
RTU5	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
RTU6	Roof top unit	3.91E-03	0.02	3.91E-03	0.02	0.05	0.22	3.09E-04	1.35E-03	0.04	0.18	2.83E-03	0.01	2.57E-07	1.13E-06
PLANT	Roof top unit	2.61E-03	0.01	2.61E-03	0.01	0.03	0.13	2.06E-04	9.02E-04	0.03	0.13	1.89E-03	0.01	1.72E-07	7.53E-07
MAINT	Roof top unit	0.01	0.04	0.01	0.04	0.11	0.48	6.85E-04	3.00E-03	0.10	0.44	0.01	0.04	5.71E-07	2.50E-06
IRH1	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07

TABLE 3
Criteria Pollutant Emissions

Source Name	Description	PM10 lb/hr	PM10 ton/year	PM2.5 lb/hr	PM2.5 tpy	NOX lb/hr	NOX tpy	SO2 lb/hr	SO2 tpy	CO lb/hr	CO tpy	VOC lb/hr	VOC tpy	Lead lb/hr	Lead tpy
IRH2	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH3	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH4	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH5	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH6	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH7	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
IRH8	Infrared heater	1.49E-03	0.01	1.49E-03	0.01	0.02	0.09	1.18E-04	5.17E-04	0.02	0.09	1.08E-03	4.73E-03	9.80E-08	4.29E-07
CT01	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT02	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT03	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT04	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT05	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT06	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT07	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT08	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT09	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT10	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT11	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
CT12	Cooling tower cell	3.17E-02	0.14	3.17E-02	0.14	--	--	--	--	--	--	--	--	--	--
	Facility Total	**3.50**	**15.39**	**3.50**	**15.39**	**22.61**	**99.03**	**0.19**	**0.86**	**12.12**	**53.14**	**1.27**	**5.57**	**1.53E-04**	**6.69E-04**

Toxic Air Pollutants

A summary of facility wide toxic air pollutant emissions are presented in Table 5 and compared to their respective Screening Emission Level as described in IDAPA 58.01.01.585 and 58.01.01.586. Napthalene, formaldehyde, arsenic, nickel, cadmium, and chromium emissions will need to be modeled to demonstrate compliance because the facility emissions exceed the Screening Emission Levels.

Emissions from the anhydrous ammonia refrigeration system are not included, as under normal operations, the system will not release emissions to the ambient air. In the event of a system backup, an instantaneous release would occur from a pressure release valve. Therefore, as ammonia is only released from the anhydrous ammonia refrigeration system, ammonia will not require dispersion modeling. Table 6 displays the source emission rate for pollutants that will require dispersion modeling.

TABLE 5
Facility Toxic Air Pollutant Emissions Summary

Pollutant	Facility Total Emission Rate (lb/hr)	IDAPA 58.01.01.585 Screening Level	Comparison to Screening Level
Pentane	0.79	1.18E+02	Below
Hexane	0.55	1.20E+01	Below
Naphthalene	1.86E-04	9.10E-05	**Exceeds**
Toluene	1.04E-03	2.50E+01	Below
Cobalt	2.56E-05	3.30E-03	Below
Manganese	1.16E-04	6.70E-02	Below
Molybdenum	3.34E-04	3.33E-01	Below
Selenium	7.30E-06	1.30E-02	Below
Vanadium	6.99E-04	3.00E-03	Below
Zinc	8.82E-03	3.33E-01	Below
Barium	1.34E-03	3.30E-02	Below
Copper	2.04E-04	1.30E-02	Below
Pollutant	**Facility Total Emission Rate (lb/hr)**	**IDAPA 58.01.01.586 Screening Level**	**Comparison to Screening Level**
Benzene	6.40E-04	8.00E-04	Below
3-Methylchloranthrene	5.48E-07	2.50E-06	Below
Benzo(a)pyrene	3.66E-07	2.00E-06	Below
Formaldehyde	2.29E-02	5.10E-04	**Exceed**
POM (7-PAH)4	3.50E-06	2.00E-06	Below
Arsenic	6.09E-05	1.50E-06	**Exceed**
Nickel	6.40E-04	2.75E-05	**Exceed**
Beryllium	3.66E-06	2.80E-05	Below
Cadmium	3.35E-04	3.70E-06	**Exceed**
Chromium	4.27E-04	3.30E-02	**Exceed**

TABLE 6
Toxic Air Pollutant Emissions

Source Name	Description	Naphthalene lb/hr	Formaldehyde lb/hr	Arsenic lb/hr	Nickel lb/hr	Cadmium lb/hr	Chromium lb/hr
BOILER1	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER2	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER3	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER4	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER5	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER6	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER7	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER8	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER9	Boiler	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BRMAU1	Makeup air unit	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
BRMAU2	Makeup air unit	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
LABMAU	Makeup air unit	4.84E-07	5.96E-05	1.59E-07	1.67E-06	8.73E-07	1.11E-06
BATTMAU	Makeup air unit	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
RTU1	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU2	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU3	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU4	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU5	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU6	Roof top unit	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
PLANT	Roof top unit	2.09E-07	2.57E-05	6.86E-08	7.20E-07	3.77E-07	4.80E-07
MAINT	Roof top unit	2.09E-07	2.57E-05	6.86E-08	7.20E-07	3.77E-07	4.80E-07
IRH1	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07

TABLE 6
Toxic Air Pollutant Emissions

Source Name	Description	Naphthalene lb/hr	Formaldehyde lb/hr	Arsenic lb/hr	Nickel lb/hr	Cadmium lb/hr	Chromium lb/hr
IRH2	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH3	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH4	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH5	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH6	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH7	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH8	Infrared heater	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
Facility Total		**1.86E-04**	**2.29E-02**	**6.09E-05**	**6.40E-04**	**3.35E-04**	**4.27E-04**

Appendix A - Model Source Input

Regulatory Review

Standards and Criteria Levels

Table 7 summarizes applicable criteria including:

- the National Ambient Air Quality Standards (NAAQS).
- the significant contribution levels (SCL),

TABLE 7
Regulatory Standards and Criteria Levels

Pollutant	Averaging Period	Facility Total Emission Rate	IDEQ Modeling Threshold[a]	Modeling Required
PM10	24-hour	3.50 lb/hr	2.6 lb/hr	Yes
PM2.5	24-hour	3.50 lb/hr	0.63 lb/hr	Yes
	Annual	15.39 tpy	4.1 tpy	Yes
CO	1-hour, 8-hour	12.12 lb/hr	175 lb/hr (15 lb/hr)	No
NO2	1-hour	22.61 lb/hr	2.4 lb/hr	Yes
	Annual	99.03 tpy	14 tpy	Yes
SO2	1-hour	0.19 lb/hr	2.5 lb/hr (0.21 lb/hr)	Yes[b]
	Annual	0.86 tpy	14 tpy (1.2 tpy)	No
Lead	3-month rolling average	1.53E-04 lb/hr[c]	14 lb/month	No

[a] Criteria pollutants from Level II sources may be evaluated on a case by case basis. Values in parenthesis represent Level 1 sources.
[b] Even though the threshold level for annual emissions is not exceeded for this case, IDEQ requires modeling of all averaging periods for that pollutant if the threshold is exceeded for any averaging period for that pollutant.
[c] Equivalent to approximately 0.11 lb/month

Modeling will be conducted to determine whether the proposed emissions will result in an impact greater than the applicable Idaho significant contribution levels (SCL) shown in Table 7. If the predicted impacts are not significant (that is, less than the SCL), the modeling is complete for that pollutant under that averaging time. If impacts are significant, a more refined analysis will be conducted for demonstration of compliance with the NAAQS. A description of the modeling methodology is presented below.

Dispersion Model

For the air quality analysis, the EPA-approved AERMOD (Version 11353) model is proposed. AERMOD will be run with the following default options.

- Use of calms processing routines,
- Use of missing data processing routines,
- Default vertical potential temperature gradients.

Direction specific building downwash parameters will be calculated using the EPA Building Profile Input Program for PRIME (BPIP-Prime), Version 04274.

Receptors

The ambient air boundary will be the fenceline, delineated by the area that is fenced within the plant boundary.

The selection of receptors in AERMOD will be as follows:

- Discrete Receptors 25 meters around the property line.
- A 50-meter grid extended approximately 200 meters.
- A 100-meter grid extended approximately 1 kilometer.
- A 500-meter grid extended approximately 5 kilometers.

U.S. Geological Survey (USGS) National Elevation Dataset (NED) terrain data will be used in conjunction with the AERMAP pre-processor (version 09040) to determine receptor elevations and terrain maxima.

Meteorological Data

Agro Farma requests that IDEQ provides AERMOD-ready data representative of this project location. Upon receipt of files from IDEQ, AERMOD will be run with the meteorological data files.

Ambient Conditions

Background air quality data will be provided by IDEQ. Background concentrations will be added to model results for comparison to the NAAQS.

Preliminary Analysis

The preliminary analysis for each pollutant will be conducted as follows:

- If the predicted impacts are not significant (that is, less than the SCL), the modeling is complete for that pollutant under that averaging time.
- If impacts are significant, a more refined analysis, as described below, will be conducted.
- For annual average NOx, it will be initially assumed that all NOx is converted to NO_2. If the resulting concentration exceeds the SCL, then the concentration will be multiplied by the default annual NO_2/NOx ratio of 0.75 as suggested by EPA and compared to the SCL again. If the resulting concentrations still exceed the SCL, then a refined analysis will be conducted.

Refined Analysis

Comparison to the Ambient Air Quality Standards will be conducted as follows:

- For pollutants with concentrations greater than the SCLs, the maximum concentration will be determined and compared to the NAAQS. This maximum concentration will include contributions from the facility, nearby sources, and ambient background concentrations.
- IDEQ will be contacted to identify nearby sources, if any, that need to be included in the analysis.
- 1-hour NO2 we be evaluated by assuming that all NOx is converted to NO2. If the resulting concentration exceeds the NAAQS, 1-hour NO_2 will be evaluated using a Tiered approach
  - Tier 1 will use a default ambient ratio of 0.80 for NO to NO_2 conversion.
  - Tier 2 will implement the Plume Volume Molar Ratio Method (PVMRM) or Ozone Limiting Method (OLM).
  - IDEQ will be consulted if further refinement is necessary.

Output – Presentation of Results

The results of the air dispersion modeling analyses will be presented as follows:

- A description of modeling methodologies and input data,
- A summary of the results in tabular and, where appropriate, graphical form,
- Modeling files used for the AERMOD analysis will be provided with the application on compact disk,
- Any deviations from the methodology proposed in this protocol will be presented.

Figure 1 – Site Location Plan

TABLE A-1
Modeled Point Source Parameters

Source Name	Description	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)
BOILER1	Boiler	15.85	472	18.86	0.61
BOILER2	Boiler	15.85	472	18.86	0.61
BOILER3	Boiler	15.85	472	18.86	0.61
BOILER4	Boiler	15.85	472	18.86	0.61
BOILER5	Boiler	15.85	472	18.86	0.61
BOILER6	Boiler	15.85	472	18.86	0.61
BOILER7	Boiler	15.85	472	18.86	0.61
BOILER8	Boiler	15.85	472	18.86	0.61
BOILER9	Boiler	15.85	472	18.86	0.61
CT01	Cooling tower cell	23.47	300	11.43	3.96
CT02	Cooling tower cell	23.47	300	11.43	3.96
CT03	Cooling tower cell	23.47	300	11/43	3.96
CT04	Cooling tower cell	23.47	300	11.43	3.96
CT05	Cooling tower cell	23.47	300	11.43	3.96
CT06	Cooling tower cell	23.47	300	11.43	3.96
CT07	Cooling tower cell	23.47	300	11.43	3.96
CT08	Cooling tower cell	23.47	300	11.43	3.96
CT09	Cooling tower cell	23.47	300	11.43	3.96
CT10	Cooling tower cell	23.47	300	11.43	3.96
CT11	Cooling tower cell	23.47	300	11.43	3.96
CT12	Cooling tower cell	23.47	300	11.43	3.96

TABLE A-2
Modeled Volume Source Parameters

Source Name	Description	Release Height (meters)	Initial Horizontal Dimension (meters)	Initial Vertical Dimension (meters)
BRMAU1	Makeup air unit	13.72	0.024	6.38
BRMAU2	Makeup air unit	13.72	0.024	6.38
LABMAU	Makeup air unit	13.72	0.024	6.38
BATTMAU	Makeup air unit	13.72	0.024	6.38
RTU1	Roof top unit	13.72	0.024	6.38
RTU2	Roof top unit	13.72	0.024	6.38
RTU3	Roof top unit	13.72	0.024	6.38
RTU4	Roof top unit	13.72	0.024	6.38
RTU5	Roof top unit	13.72	0.024	6.38
RTU6	Roof top unit	13.72	0.024	6.38
PLANT	Roof top unit	13.72	0.024	6.38
MAINT	Roof top unit	13.72	0.024	6.38
IRH1	Infrared heater	13.72	0.024	6.38
IRH2	Infrared heater	13.72	0.024	6.38
IRH3	Infrared heater	13.72	0.024	6.38
IRH4	Infrared heater	13.72	0.024	6.38
IRH5	Infrared heater	13.72	0.024	6.38
IRH6	Infrared heater	13.72	0.024	6.38
IRH7	Infrared heater	13.72	0.024	6.38
IRH8	Infrared heater	13.72	0.024	6.38

TABLE A-3
Modeled Emission Rates

Source Name	Description	PM_{10} lb/hr	$PM_{2.5}$ lb/hr	$PM_{2.5}$ ton/year	NO_X lb/hr	NO_X tpy	SO_2 lb/hr	Naphthalene lb/hr	Formaldehyde lb/hr	Arsenic lb/hr	Nickel lb/hr	Cadmium lb/hr	Chromium lb/hr
BOILER1	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER2	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER3	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER4	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER5	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER6	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER7	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER8	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BOILER9	Boiler	0.33	0.33	1.45	2.32	10.16	0.02	1.95E-05	2.40E-03	6.40E-06	6.72E-05	3.52E-05	4.48E-05
BRMAU1	Makeup air unit	0.03	0.03	0.13	0.35	1.53	2.11E-03	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
BRMAU2	Makeup air unit	0.03	0.03	0.13	0.35	1.53	2.11E-03	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
LABMAU	Makeup air unit	0.01	0.01	0.04	0.08	0.35	4.76E-04	4.84E-07	5.96E-05	1.59E-07	1.67E-06	8.73E-07	1.11E-06
BATTMAU	Makeup air unit	0.03	0.03	0.13	0.35	1.53	2.11E-03	2.15E-06	2.64E-04	7.04E-07	7.39E-06	3.87E-06	4.93E-06
RTU1	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU2	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU3	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU4	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU5	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
RTU6	Roof top unit	3.91E-03	3.91E-03	0.02	0.05	0.22	3.09E-04	3.14E-07	3.86E-05	1.03E-07	1.08E-06	5.67E-07	7.21E-07
PLANT	Roof top unit	2.61E-03	2.61E-03	0.01	0.03	0.13	2.06E-04	2.09E-07	2.57E-05	6.86E-08	7.20E-07	3.77E-07	4.80E-07
MAINT	Roof top unit	0.01	0.01	0.04	0.11	0.48	6.85E-04	2.09E-07	2.57E-05	6.86E-08	7.20E-07	3.77E-07	4.80E-07
IRH1	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH2	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07

TABLE A-3
Modeled Emission Rates

Source Name	Description	PM_{10} lb/hr	$PM_{2.5}$ lb/hr	$PM_{2.5}$ ton/year	NO_X lb/hr	NO_X tpy	SO_2 lb/hr	Naphthalene lb/hr	Formaldehyde lb/hr	Arsenic lb/hr	Nickel lb/hr	Cadmium lb/hr	Chromium lb/hr
IRH3	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH4	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH5	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH6	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH7	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
IRH8	Infrared heater	1.49E-03	1.49E-03	0.01	0.02	0.09	1.18E-04	1.20E-07	1.47E-05	3.92E-08	4.12E-07	2.16E-07	2.74E-07
CT01	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT02	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT03	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT04	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT05	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT06	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT07	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT08	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT09	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT10	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT11	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--
CT12	Cooling tower cell	3.17E-02	3.17E-02	0.14	--	--	--	--	--	--	--	--	--

Appendix B – Cleaver Brooks Emissions Data

Cleaver-Brooks Boiler Expected Emission Data

Producing Steam Firing — **Nat Gas**

BACKGROUND INFORMATION

Date	12/06/11	Boiler Model	CB(LE)
Author	L.C. Banks	Altitude (feet)	4100
Customer	Chobani Yogurt	Operating Pressure (p	125.00
City & State	Twin Falls , IN.	Furnace Volume (cuft)	230.17
		Furnace Heat Release (btu/hr/cu ft)	141,891
		Heating Surface (sqft)	3,500
		Nox System	60

Nat Gas		Firing Rate			
		25%	**50%**	**75%**	**100%**
Horsepower		200	400	600	800
Input , Btu/hr		8,165,000	16,329,000	24,494,000	32,659,000
CO	ppm	150	50	50	50
	lb/MMBtu	0.109	0.036	0.036	0.036
	lb/hr	0.89	0.60	0.89	1.19
	tpy	3.92	2.61	3.92	5.22
NOx	ppm	60	60	60	60
	lb/MMBtu	0.071	0.071	0.071	0.071
	lb/hr	0.58	1.15	1.73	2.31
	tpy	2.52	5.05	7.57	10.10
SOx	ppm	0.36	0.36	0.36	0.36
	lb/MMBtu	0.0006	0.0006	0.0006	0.0006
	lb/hr	0.0049	0.0098	0.0147	0.0196
	tpy	0.02	0.04	0.06	0.09
HC/VOCs	ppm	10	10	10	10
	lb/MMBtu	0.004	0.004	0.004	0.004
	lb/hr	0.033	0.065	0.098	0.131
	tpy	0.14	0.29	0.43	0.57
PM(Filterabe)	ppm	N/A	N/A	N/A	N/A
EPA Method 5	lb/MMBtu	0.010	0.010	0.010	0.010
	lb/hr	0.082	0.163	0.245	0.327
	tpy	0.36	0.72	1.07	1.43
Exhaust Data					
Temperature, F		365	375	380	390
Flow	ACFM	2,828	5,727	8,643	11,664
	SCFM (70 Degrees Fah.)	1,602	3,203	4,805	6,406
	DCFM	1,422	2,844	4,266	5,688
	lb/hr	7,207	14,414	21,621	28,828
Velocity	ft/sec	15.00	30.38	45.85	61.88
	ft/min	900	1,823	2,751	3,713

Notes:

1) All ppm levels are corrected to dry at 3% oxygen.
2) Emission data based on 82% boiler efficiency.
3) % H2O , by volume in exhaust gas is **17.24** % O2, by volume **2.47**
4) Water vapor in exhaust gas is **98.91** lbs/MMBtu of fuel fired
5) CO_2 produced is **116.31** lbs/MMBtu of fuel fired
6) Particulate is exclusive of any particulates in combustion air or other sources of residual particulates from material. PM level indicated on this form is based on combustion air and fuel being clean and turndown up to 4:1 above 40 hp.
7) Heat input is based on high heating value (HHV).
8.) Emission produced in tons per year (tpy) is based on 24 hours per day for 365 days = 8,760 hours per ye

Appendix C – Shambaugh & Son Emissions Data

Environmental Permitting Data
Agro-Farma, Twin Falls, Idaho

Shambaugh & Son Job 170993
12/19/2011

The following data items are in response to, and in order of the data requested in Rick McCormick's email dated 12/2/2011.

Item 1 - Drawings

Item 2 - Stack Parameters
See Item 3 below.

Item 3 - Combustion Equipment

TAG	Source	Schedule	Manufacturer	Model	Drawings	Stack Height From Ground (ft)	Stack Diameter (in)	Stack Flow (lb/hr)	Stack Temp. (degF)	BTU Input (Btu/hr)	Emissions Data
01	Boiler 1	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
02	Boiler 2	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
03	Boiler 3	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
04	Boiler 4	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
05	Boiler 5	Phase 1	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
06	Boiler 6	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
07	Boiler 7	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
08	Boiler 8	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
09	Boiler 9	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
10	Boiler 10	Phase 2	Cleaver Brooks	CBLE-700-800		52	24"	28,828	390	32,659,000	Attached
11	Boiler Room MAU (50,000 cfm, direct fired)	Phase 1	Rupp Air	RAM 225		none	none	none	none	3,586,957	N/A
12	Boiler Room MAU (50,000 cfm, direct fired)	Phase 2	Rupp Air	RAM 225		none	none	none	none	3,586,957	N/A
13	Main Office RTU 1 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
14	Main Office RTU 2 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
15	Main Office RTU 3 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
16	Main Office RTU 4 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
17	Main Office RTU 5 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
18	Main Office RTU 6 (indirect fired roof top unit)	Phase 1	Carrier	48A5,T,030		N/A	N/A	N/A	N/A	525,000	N/A
19	Lab MAU (6,000 cfm, indirect fired roof top unit)	Phase 1	Aaon	RN-050		N/A	N/A	N/A	N/A	810,000	N/A
20	Meeting/RR/Plant Offices/Maintenance Office RTU (indirect fired roof top unit)	Phase 1	Carrier	48A5,S,020		N/A	N/A	N/A	N/A	350,000	N/A
21	Maintenance/Parts/Fab RTU (indirect fired roof top unit)	Phase 1	Carrier	48A5,S,060		N/A	N/A	N/A	N/A	1,164,000	N/A
22	Battery MAU (42,000 cfm, direct fired)	Phase 1	Rupp Air	RAM 222		none	none	none	none	3,586,957	N/A
23	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
24	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
25	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
26	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
27	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
28	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
29	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
30	Receiving Bay IRH	Phase 1	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
31	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
32	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
33	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A
34	Receiving Bay IRH	Future	Reznor	VR-200-60		45	4"	N/A	N/A	200,000	N/A

Item 4 - Ammonia Charge
Phase 1 total approximate is 10,800 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 8 chillers)
Additional Phase 2 total approximate is 4,020 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 3 chillers)
Total approximate is 14,850 lbs. anhydrous ammonia (approximately 1,350 lbs. each chiller, 11 chillers)

Item 5 - Cooling Tower Data

	Phase 1	Additional Phase 2	Total Phase 1 + Phase 2
Number of Tower Cells	8	4	
Average Water Flow Rate per Cell (gal/min)	2,796	2,944	2,845
Total Water Flow Rate (gal/min)	22,365	11,775	34,140
TDS of blowdown (mg/l or ppmw)	1500	1500	1500
Control efficiency of drift eliminators (gal. drift/gal. flow)	0.00005	0.00005	0.00005
Other Parameters			
Number of cells per tower (outlet fans)	1	1	1
Height at cell release (ft):	77	77	77
Discharge flow per cell (ACFM):	314,078	314,078	314,078
Diameter of each cell (ft):	13	13	13
Area of cell discharge (ft2):	139.6	139.6	139.6
Average Temperature of cell discharge (degF):	80.3	80.3	80.3

Appendix G

Air Dispersion Modeling Report

An air dispersion modeling protocol was prepared by CH2M HILL and submitted to DEQ on December 27, 2011. The source parameters and modeling assumptions were identified within the modeling protocol. The protocol was approved via e-mail by DEQ on January 12, 2012. The air dispersion modeling protocol and DEQ approval are included in Appendix E. This appendix outlines the modeling methodology, inputs, and results.

Modeled Pollutants

Facility-wide emissions were compared to DEQ's Level I Screening Levels, as summarized in Table 1. Modeling is not required to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) for SO_2, CO, or lead. An ambient air impact analysis was performed for PM_{10}, $PM_{2.5}$, and NO_2.

TABLE 1
Emission Rates and Modeling Thresholds

Pollutant	Averaging Period	Facility Total Emission Rate	IDEQ Modeling Threshold	Modeling Required
PM_{10}	24-hour	2.02 lb/hr	0.22 lb/hr	Yes
$PM_{2.5}$	24-hour	2.02 lb/hr	0.054 lb/hr	Yes
	Annual	8.92 tpy	0.35 tpy	Yes
CO	1-hour, 8-hour	7.10 lb/hr	15 lb/hr	No
NO_x	1-hour	12.98 lb/hr	0.2 lb/hr	Yes
	Annual	56.86 tpy	1.2 tpy	Yes
SO_2	1-hour	0.11 lb/hr	0.21 lb/hr	No
	Annual	0.49 tpy	1.2 tpy	No
Lead	3-month rolling average	8.69E-05 lb/hr[a]	14 lb/month	No

[a] Equivalent to approximately 0.063 lb/month

Facility-wide toxic air pollutant (TAP) emissions were compared to the screening emission levels (EL) in IDAPA 58.01.01.585 and 58.01.01.586. Any TAP that has an emissions increase that exceeds the EL must be modeled to demonstrate that ambient concentrations are below the acceptable ambient concentrations (AAC) and acceptable ambient concentration for carcinogens (AACC). The TAPs that required modeling are naphthalene, formaldehyde, arsenic, nickel, and cadmium. All TAP emissions and screening levels are summarized in Table 2.

TABLE 2
Facility Toxic Air Pollutant Emissions Summary

Pollutant	Facility Total Emission Rate (lb/hr)	IDAPA 58.01.01.585 Screening Level	Comparison to Screening Level
Pentane	0.45	1.18E+02	Below
Hexane	0.31	1.20E+01	Below
Naphthalene	1.06E-04	9.10E-05	**Exceeds**
Toluene	5.90E-04	2.50E+01	Below
Cobalt	1.45E-05	3.30E-03	Below

TABLE 2
Facility Toxic Air Pollutant Emissions Summary

Pollutant	Facility Total Emission Rate (lb/hr)	IDAPA 58.01.01.585 Screening Level	Comparison to Screening Level
Manganese	6.57E-05	6.70E-02	Below
Molybdenum	1.90E-04	3.33E-01	Below
Selenium	4.14E-06	1.30E-02	Below
Vanadium	3.97E-04	3.00E-03	Below
Zinc	5.00E-03	3.33E-01	Below
Barium	7.60E-04	3.30E-02	Below
Copper	9.22E-05	1.30E-02	Below
Pollutant	**Facility Total Emission Rate (lb/hr)**	**IDAPA 58.01.01.586 Screening Level**	**Comparison to Screening Level**
Benzene	3.64E-04	8.00E-04	Below
3-Methylchloranthrene	3.12E-07	2.50E-06	Below
Benzo(a)pyrene	2.08E-07	2.00E-06	Below
Formaldehyde	1.30E-02	5.10E-04	**Exceed**
POM (7-PAH)4	3.50E-06	2.00E-06	Below
Arsenic	1.99E-06	1.50E-06	**Exceed**
Nickel	3.64E-04	2.75E-05	**Exceed**
Beryllium	2.08E-06	2.80E-05	Below
Cadmium	1.90E-04	3.70E-06	**Exceed**
Chromium	2.42E-04	3.30E-02	Below

Modeling Methodology

The EPA-recommended AERMOD dispersion modeling system was used to estimate TAP air quality impacts. AERMOD (Version 11353) was run with the following default options:

- Use of calms processing routines
- Use of missing data processing routines
- Default vertical potential temperature gradients

The use of the BETA version of AERMOD was approved by DEQ for this project in order to consider the horizontal releases from three of the modeled sources.

Ambient air was defined as mixed signs and fencing surrounding the entire facility property boundary (see Figure 3). As such, the immediate area around the Chobani Café (store front) was determined to be ambient air because it will be open to the public. The Café is located on the northern perimeter of the facility. Agro Farma will place a no public access sign where the access road forms a T. The parking lot

area will be used for employees of the Agro Farma facility only and a separate parking area for public use will be located on the eastern, front side of the Café. In addition, there is a canal that runs through the northeastern portion of the facility property. Based on an agreement with Agro Farma, Twin Falls Canal Company is responsible for maintenance of the canal. As such, this canal is also considered ambient air.

Pollutant concentrations were calculated at all locations considered to be ambient air. Receptor locations in AERMOD were selected as follows:

- Discrete receptors spaced 25 meters around the property line
- Discrete receptors spaced 25 meters along the access road and Chobani Café location
- Discrete receptors spaced 25 meters along the canal
- A 50-meter grid extended approximately 200 meters
- A 100-meter grid extended approximately 1 kilometer

U.S. Geological Survey (USGS) National Elevation Dataset (NED) terrain data were used in conjunction with the AERMAP pre-processor (version 09040) to determine receptor elevations and terrain maxima. All receptor, source, and building coordinates are in the NAD 83 datum.

AERMOD ready meteorological data was provided by DEQ for 2006 through 2010. Meteorological data was processed using surface data from Twin Falls Joslin Field and included 1-minute ASOS data.

Emissions were modeled from the natural gas boilers, building heaters, and cooling tower cells. Emissions from the anhydrous ammonia refrigeration system were not included for modeling, as under normal operations, the system will not release emissions to the ambient air. The five boiler stacks, makeup air units (MAU), rooftop units (RTU), and 8 cooling tower cells were represented as point sources. The infra red heaters (IRH) were represented as volume sources.

Release parameters for all sources are included in Tables 3 and 4. Average flow rates and temperatures provided by the Cleaver Brooks (manufacturer) were used for the natural gas boilers. For the building heaters and cooling towers, the average flow rates and temperatures were provided by Shambaugh & Son. Manufacturer data for RTU and MAU exhaust temperature and exhaust flow were not available upon contacting manufacturers. Therefore, CH2M HILL used best engineering judgment to estimate these parameters based on similar sized units (1 MMBTU/hr and 5 MMBTU/hr baking heater).

TABLE 3
Point Source Stack Parameters

Source Type	Number of Sources	Release Type	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)
Natural Gas Boiler Stack	5	Vertical	15.85	472	18.86[a]	0.61
Boiler Room MAU[b]	1	Horizontal	14.63	313	15.24	1.27
Lab MAU[b]	1	Horizontal	14.63	313	15.24	0.50
Battery MAU[b]	1	Horizontal	14.63	313	15.24	1.27
Plant Offices RTU[b]	1	Vertical	14.63	313	15.24	0.50
Maintenance RTU[b]	1	Vertical	14.63	313	15.24	0.50
Roof Top Units[b]	6	Vertical	14.63	313	15.24	0.50
Cooling Tower Cells	8	Vertical	23.47	300	11.43[c]	3.96

[a] Velocity based on flow rate of 6,406 scfm (based on Cleaver Brooks Emissions Data – Appendix B)[c]

TABLE 3
Point Source Stack Parameters

Source Type	Number of Sources	Release Type	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)

[b] Exhaust parameters estimated based on good engineering judgment
[c] Velocity based on flow rate of 314,078 acfm (based on Agro Farma Emissions Data prepared by Shambaugh and Son – Appendix C)

TABLE 4
Volume Source Release Parameters

Source Type	Number of Sources	Release Height[a] (meters)	Initial Horizontal Dimension[b] (meters)	Initial Vertical Dimension[c] (meters)
Receiving bay infra red heater	8	8.53	0.024	3.97

[a] Release height based on building height of 8.53 meters
[b] Initial horizontal dimension based on 4-inch opening divided by 4.3
[c] Initial vertical dimension based on building height of 8.53 meters divided by 2.15

DEQ identified The Amalgamated Sugar Company (TASCO) facility as a nearby facility that must be included in the cumulative NO_2 impact analyses for 1-hour and annual NO2. Table 5 describes the sources that were included in the Agro Farma modeling analysis. The TASCO stack parameters and emissions were provided by DEQ. Emissions from sources PB3 and PD1A were modeled according to the provided operational schedule, which indicated emission only occurred during the months of September through March.

TABLE 5
TASCO Modeling Parameters

Source Type	Release Type	Stack Height (meters)	Temperature (Kelvin)	Exit Velocity (meter/second)	Stack Diameter (meters)	NO_x Emission Rate (lb/hr)
PB1 Foster Wheeler Boiler	Vertical	47.85	416	15.06	2.01	200
PB2 Babcock and Wilcox Boiler	Vertical	66.14	456	22.56	2.74	220
PB3 Keeler Boiler	Vertical	15.0	422	10.92	1.22	27.84
PD1A Pulp Dryer	Vertical	28.04	348	6.87	2.44	45

1-hour NO_2 was evaluated using a tiered approach, and the tier 3 methodology was required to demonstrate compliance with the NAAQS. The tire 3 analysis implemented the Plume Volume Molar Ratio Method (PVMRM). DEQ recommended an in-stack NO_2/NO_x ratio of 0.50, an equilibrium ratio of 0.80, and hourly background ozone values were provided.

Model Results

Criteria Pollutants

Criteria pollutant modeling results are summarized in Table 6. Background concentrations were provided by DEQ. The sum of modeled concentration and background concentration were compared to the NAAQS. Model output shows that all criteria pollutant concentrations are below the NAAQS except for 1-hour NO_2, which required additional post-processing that is described in more detail below.

TABLE 6
Criteria Pollutant Modeling Results

Pollutant	Averaging Period	Maximum Concentration (µg/m³)	Background Concentration (µg/m³)	Total Concentration (µg/m³)	NAAQS (µg/m³)
PM_{10}	24-hour	7.0	52.0	59.0	150
$PM_{2.5}$	24-hour	7.0	21.3	28.3	35
$PM_{2.5}$	Annual	1.6	7.2	8.8	15
NO_2	1-hour	See Note[a]	--	--	188
NO_2	Annual	81.1[b]	--	81.1	100

[a] 1-hour NO_2 model results are described in further detail below
[b] NO_2 results include concentrations from nearby TASCO facility and hourly NO_2 background concentrations

1-hour NO_2 Evaluation

Following the procedures described above, the results of the dispersion modeling analysis indicate there may be modeled exceedances of the 1-hour NO_2 NAAQS of 188 µg/m³. Therefore, post processing of AERMOD generated output files was conducted to determine the contribution of each competing facility impacts to the modeled exceedance. The procedures below outline the approach.

1. Determine the 98th percentile 1-hour NO_2 concentration averaged over the five modeled years for each receptor.
2. For each receptor that modeled an exceedance of the NAAQS of 188 µg/m³ in step 1, the AERMOD generated MAXDCONT file was used to determine the contribution from each facility during that exceedance.
3. The contribution from each facility were compared to the 1-hour NO_2 SIL of 7.5 µg/m³.
4. The contribution from the Agro Farma facility at each impact was below the SIL.

Following the steps above, it was determined that the maximum modeled concentration of the Agro Farma Facility during any exceedance of the NAAQS would be 0.36 µg/m³. This is below the SIL of 7.5 µg/m³. Therefore, the Agro Farma facility would not cause or significantly contribute to a modeled exceedance of the NAAQS. A detailed summary of the Agro Farma facility's impacts during each modeled exceedance of the NAAQS is in Appendix H.

Toxic Air Pollutants

TAP modeling results were compared to the AAC and AACC values for each pollutant. Table 7 shows that all TAP concentrations were below their respective standards.

TABLE 7
TAP Modeling Results

Pollutant	Averaging Period	Maximum Concentration ($\mu g/m^3$)	AAC/AACC[a] ($\mu g/m^3$)
Naphthalene	24-hour	4.20E-04	2500
Formaldehyde	Annual	1.13E-02	7.70E-02
Arsenic	Annual	3.00E-05	2.34E-04
Nickel	Annual	3.20E-04	4.20E-03
Cadmium	Annual	1.70E-04	5.60E-04

[a] Naphthalene concentrations must be below AAC. All other TAPs must be below AACC.

Based on the modeling results described, the project complies with all applicable ambient air standards. All modeling files, including the MAXDCONT output files for the 1-hour NO2 evaluation, are included on CD.

Appendix H

1-hr Post Processing

Appendix H
1-hour NO2 Post Processing
Evaluation of Facility Contribution to 1-hour NO2 Exceedance

Receptor		Modeled 98th percentile averaged	Contribution from Agro Farma Facility (µg/m³)				
UTMX	UTMY	over 5-years (µg/m³)	2006	2007	2008	2009	2010
710800	4712100	258.164514	0.04038	0.00161	0.00393	0.35627	0.10167
710900	4712100	324.32074	0.00148	0.00131	0.00724	0.00702	0.00859
711000	4712100	220.136656	0.00739	0.00706	0.00171	0.00691	0.00835
711100	4712100	235.489548	0.00103	0.00136	0.00127	0.00513	0.00118
711200	4712100	246.13509	0.00149	0.00414	0.00112	0.00506	0.00153
711300	4712100	234.42002	0.00401	0.0021	0.00376	0.00213	0.0028
711400	4712100	228.372194	0.00218	0.00333	0.0009	0.00472	0.00164
711500	4712100	220.695638	0.00209	0.00444	0.00312	0.00292	0.01582
711600	4712100	211.931984	0.00168	0.00138	0.00306	0.00291	0
711700	4712100	201.113604	0.00212	0.00198	0.00077	0.00311	0
711800	4712100	191.535942	0	0.00151	0	0.01396	0
710800	4712200	202.609874	0.00369	0.00115	0.00275	0.00108	0.00095
710900	4712200	197.790942	0.00721	0.01013	0.00486	0.00431	0.00767
711000	4712200	199.43572	0.00735	0.00163	0.00229	0.00082	0.00105
711100	4712200	200.096758	0	0.00291	0.00698	0.02957	0.00212
711200	4712200	225.48911	0.00205	0.00133	0.00659	0.00426	0.00126
711300	4712200	234.106698	0.001	0.00108	0.00125	0.00193	0.00677
711400	4712200	244.40938	0.00261	0.00287	0.00215	0.00897	0.00131
711500	4712200	226.063308	0.00572	0.00194	0.00161	0.00144	0.00339
711600	4712200	211.174874	0.00586	0.00194	0.00201	0.00251	0.00106
711700	4712200	199.191914	0	0.0019	0.00208	0.0019	0.00303
711800	4712200	192.423796	0	0.00181	0	0.00261	0
710800	4712300	199.77627	0.00165	0.00556	0.00178	0.00866	0.01136
710900	4712300	215.079768	0.00256	0.0021	0.00222	0.00257	0.00857
711000	4712300	210.39487	0.00111	0.00144	0.00167	0.00385	0.00258
711100	4712300	195.11456	0.0028	0.00297	0.00771	0	0.0019
711200	4712300	216.491232	0.00626	0.00383	0.00607	0.06132	0.00662
711300	4712300	231.653838	0.00127	0.00324	0.00208	0.0064	0.00579
711400	4712300	212.373568	0.00609	0.00122	0.00198	0.0052	0.0058
711500	4712300	212.331368	0.00101	0.00118	0.00605	0.00128	0.00367
711600	4712300	218.354782	0.00256	0.00262	0.00273	0.00287	0.00131
711700	4712300	211.554994	0	0.00291	0.00355	0.00195	0.00431
711800	4712300	203.85321	0	0.00254	0.00298	0.0076	0.0016
711900	4712300	191.375738	0	0.00323	0.00287	0	0.0015
710900	4712400	213.204188	0.0016	0.00128	0.0036	0.00222	0.00282
711000	4712400	209.23315	0.00163	0.0026	0.00106	0.00143	0.00145
711100	4712400	199.756846	0	0.00145	0.00269	0.00503	0.00259
711200	4712400	210.912762	0.00316	0.00218	0.00169	0.00134	0.00153
711300	4712400	212.635426	0.0093	0.00157	0.0049	0.06518	0.00137
711400	4712400	216.346612	0.00192	0.00232	0.00347	0.00144	0.00408
711500	4712400	203.09538	0	0.00375	0.00133	0.0062	0
711600	4712400	195.652146	0.00252	0.00121	0.00146	0.00116	0.00408
711700	4712400	199.645312	0	0.00263	0.00129	0.00141	0.01583
711800	4712400	207.81088	0	0.00199	0.0014	0.00917	0.0173
711900	4712400	203.458768	0	0.00428	0.00409	0.00282	0.00622
710900	4712500	208.010818	0.00085	0.00402	0.00154	0.00137	0.00899
711000	4712500	208.278426	0.00207	0.00579	0.00518	0.00222	0.00421
711100	4712500	201.534192	0.0012	0.00159	0.00413	0.00344	0.00196

711300	4712500	200.884492	0.00179	0.00291	0.00763	0.00123	0.00162
711400	4712500	199.555182	0.0018	0.00499	0.00785	0.00113	0.00153
711500	4712500	202.199368	0.00261	0.00441	0.00469	0.00181	0.00642
711600	4712500	192.076614	0.00163	0.00135	0.00458	0	0
712000	4712500	193.341898	0	0.00842	0.00203	0.00332	0.00808
712100	4712500	190.492304	0	0.00335	0	0.00224	0.02849
710900	4712600	201.92034	0.00099	0.00316	0.00144	0.00191	0.00198
711000	4712600	203.56664	0.00688	0.00244	0.0064	0.00288	0.00136
711100	4712600	197.68786	0.0023	0.00179	0.00193	0.00302	0.00371
711400	4712600	189.16156	0	0.00461	0.00757	0	0.00315
711500	4712600	194.867528	0.00651	0.00414	0.00439	0.00495	0.00164
711600	4712600	191.76348	0	0.03789	0.00197	0	0.01435
711700	4712600	188.604072	0	0.00312	0.00472	0	0
710900	4712700	193.301368	0	0.00226	0	0.00827	0
711000	4712700	193.713868	0.00276	0.0029	0.00198	0	0
711100	4712700	193.925232	0	0.0018	0.00482	0.00383	0.00464
711000	4712800	193.918382	0.00094	0.00113	0.00202	0.00181	0
711000	4712900	191.600082	0.00095	0.00301	0.00522	0.00184	0
710500	4712000	199.865692	0.00088	0.00102	0.00219	0.00121	0.0028
711000	4712000	303.434068	0.00204	0.0031	0.00782	0.00241	0.00263
711500	4712000	204.854598	0	0.00117	0.00202	0.00109	0.00113
709500	4712500	190.842942	0	0	0	0.00055	0.00087
710000	4712500	242.23791	0.00075	0.00353	0.00083	0.0008	0.00161
710500	4712500	228.360246	0.00092	0.00237	0.00269	0.00662	0.00424
709500	4713000	207.149968	0.00137	0.00091	0.00075	0.00187	0.00158

Attachment

Modeling Files and Emissions XL Spreadsheet Files CD