

# Air Quality

## PERMIT TO CONSTRUCT

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**Permittee** Sorrento Lactalis Inc. – Swiss Village Plant  
**Permit Number** P-2009.0023  
**Project ID** 61712  
**Facility ID** 027-00071  
**Facility Location** 4912 East Franklin Road  
Nampa, ID 83687

### Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

**Date Issued** DRAFT Choose day, Choose year

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**Craig Woodruff, Permit Writer**

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**Mike Simon, Stationary Source Manager**

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# 1 Permit Scope

## Purpose

- 1.1 This is a revised permit to construct (PTC) to incorporate scrubber permit conditions, update the heat input rating of two boilers, and include Emergency IC Engine permit conditions.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and in the right-hand margin.
- 1.3 This PTC replaces the following permits, the terms and conditions of which shall no longer apply:
- Permit to Construct No. P-2009.0023, issued on May 1, 2015
  - Permit to Construct No. P-2009.0023, issued March 13, 2014
  - Permit to Construct No. P-2009.0023, issued August 28, 2009
  - Permit to Construct No. No. 027-00071, issued on July 20, 2001

[DRAFT]

## Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

**Table 1.1 Regulated Sources**

Permit Section	Source	Control Equipment
2	<u>Meyer-Sterner Whey Dryer/P1</u> Manufacturer: Meyer-Sterner Manufacture Date 2001 Heat Input Rating: 6.0 MMBtu/hr Production: 1,496 lbs/hr Fuel: natural gas only	Meyer-Sterner Whey Dryer Baghouse
3	<u>TetraPak Whey Dryer Burner #1/P2</u> Manufacturer: Eclipse Burner Model: Eclipse Winnox 1000 Manufacture Date 2009 Heat Input Rating: 12.5 MMBtu/hr	None
3	<u>TetraPak Whey Dryer Burner #2/P3</u> Manufacturer: Eclipse Burner Model: Eclipse Winnox 1000 Manufacture Date 2009 Heat Input Rating: 12.5 MMBtu/hr	None
3	<u>TetraPak Drying Chamber/P4</u> Manufacturer: TetraPak Manufacture Date: 2009 Max Production: 16,667 lbs/day Fuel: natural gas only	Whey Dryer Scrubber
3	<u>TetraPak Shaking Beds/P5</u> Manufacturer: TetraPak Manufacture Date: 2009 Max Production: 16,667 lbs/day Fuel: natural gas only	Shaking Bed Baghouse

Permit Section	Source	Control Equipment
4	<u>Cleaver-Brooks Boiler/P6</u> Manufacturer: Cleaver-Brooks Install Date: 2009 Heat Input Rating: 48.99 MMBtu/hr Fuel: natural gas only	None
4	<u>Superior Boiler/P7</u> Manufacturer: Superior Install Date: 2001 Boiler Heat Input Rating: 31.5 MMBtu/hr the boiler was de-rated to 24.8 MMBtu/hr De-rating Date: 2014 Fuel: natural gas only	N/A
4	<u>Cleaver-Brooks Boiler/P8</u> Manufacturer: Cleaver-Brooks Install Date: 2001 Heat Input Rating: 24.5 MMBtu/hr Fuel: natural gas only	None
4	<u>Hurst Boiler/P9</u> Manufacturer: Hurst Install Date: 2007 Heat Input Rating: 33.6 MMBtu/hr Fuel: natural gas only	None
5	<u>Emergency IC Engine/P34</u> Manufacturer: Peerless Install Date: 2001 Max Horsepower: 235.9 hp/rpm Fuel: distillate Fuel Oil	None
N/A	<u>Cheese Plant AC 01:</u> Manufacturer: Carrier Manufacture Date: 2000 Heat input rating: 0.0568 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 02:</u> Manufacturer: Carrier Manufacture Date: 2007 Heat input rating: 0.074 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 03:</u> Manufacturer: Carrier Manufacture Date: 2004 Heat input rating: 0.180 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 04:</u> Manufacturer: Carrier Manufacture Date: 2004 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 05:</u> Manufacturer: Carrier Manufacture Date: 2004 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None

Permit Section	Source	Control Equipment
N/A	<u>Cheese Plant AC 14:</u> Manufacturer: BDP Manufacture Date: 2000 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 15:</u> Manufacturer: Carrier Manufacture Date: 2004 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 16:</u> Manufacturer: Carrier Manufacture Date: 2000 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 17:</u> Manufacturer: Carrier Manufacture Date: 2008 Heat input rating: 0.125 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant AC 24:</u> Manufacturer: Carrier Manufacture Date: 2008 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 1:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 2.5 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 2:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 2.187 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 3:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 2.187 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 4:</u> Manufacturer: Greenheck Manufacture Date: 2010 Heat input rating: 0.70 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 6:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 2.5 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant MA 7:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 1.875 MMBtu/hr Fuel: natural gas	None

Permit Section	Source	Control Equipment
N/A	<u>Whey Plant AC-1:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 0.375 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-2:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 0.500 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-3:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 0.937 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-4:</u> Manufacturer: York/Johnson Controls Manufacture Date: 2010 Heat input rating: 1.25 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-9:</u> Manufacturer: Carrier Manufacture Date: Unknown Heat input rating: 0.108 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-11:</u> Manufacturer: Carrier Manufacture Date: 2010 Heat input rating: 0.120 MMBtu/hr Fuel: natural gas	None
N/A	<u>Whey Plant AC-12:</u> Manufacturer: Carrier Manufacture Date: 2000 Heat input rating: 0.125 MMBtu/hr Fuel: natural gas	None
N/A	<u>Fresh Mozz AC 01:</u> Manufacturer: Carrier Manufacture Date: 2013 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Fresh Mozz AC 02:</u> Manufacturer: Carrier Manufacture Date: 2013 Heat input rating: 0.115 MMBtu/hr Fuel: natural gas	None
N/A	<u>Cheese Plant Donaldson Dust Collection Unit:</u>	<u>Donaldson Baghouse:</u> Manufacturer: Donaldson Model: Torit Dalmatic DLMC

[DRAFT]

## 2 Natural Gas-Fired Meyer-Sterner Whey Dryer Operation

### 2.1 Process Description

Dried whey powder will be manufactured in the Meyer-Sterner whey dryer process equipment. The Meyer-Sterner whey dryer is scheduled to operate for a maximum of 8,760 hours per year. Criteria pollutants (PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>x</sub>, CO, and VOCs) are generated during the natural gas fuel burning process and additional particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM<sub>10</sub>) emissions are generated during the whey drying process. A cyclone/baghouse combination will be used to collect particulate matter emissions generated during the whey drying process.

The Meyer-Sterner whey dryer is connected to a baghouse within the building. PM<sub>10</sub> will be collected in a self-enclosed baghouse with a manufacturer rated removal efficiency of 98%. The dryer system effluent throughput is designed to produce 2,000 pounds per hour (lb/hr) of dried Whey Protein Concentrate powder discharge.

[DRAFT]

### 2.2 Control Device Descriptions

Table 2.1 Natural Gas-Fired Meyer-Sterner Whey Dryer Description

Emissions Units / Processes	Control Devices	Emission Points
<u>Meyer-Sterner Whey Dryer/P1</u> Manufacturer: Meyer-Sterner Manufacture Date: 2001 Heat Input Rating: 6.0 MMBtu/hr Max Production: 2,000 lbs/hr (on a 24 hr average) Fuel: natural gas only	<u>Whey Dryer Baghouse</u> Manufacturer: Meyer-Sterner PM/PM <sub>10</sub> Efficiency: 98%	P-1

[DRAFT]

## Emission Limits

### 2.3 Emission Limits

The PM<sub>10</sub><sup>b</sup> emissions from the Meyer-Sterner whey dryer baghouse stack shall not exceed the following limits<sup>a</sup>.

- 1.66 lb/hr<sup>c</sup>,
- 7.30 T/yr<sup>d</sup>.

- a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d Tons per any consecutive 12-calendar month period.

[DRAFT]

## **2.4 Opacity Limit**

Emissions from the Meyer-Sterner whey dryer cyclone/baghouse stack, or any other stack, vent, or functionally equivalent opening associated with the Meyer-Sterner whey dryer cyclone/baghouse, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

## **Operating Requirements**

### **2.5 Dried Whey Powder Production Limit**

The maximum amount of dried whey powder produced by the Meyer-Sterner whey dryer operation shall not exceed 1,496 pounds per hour (lb/hr), based on a 24-hour average, or 17.95 tons per day (T/day).

[March 13, 2014]

### **2.6 Meyer-Sterner Whey Dryer Baghouse System**

The permittee shall monitor and record visible emissions from the Meyer-Sterner whey dryer baghouse system once per day when operating (for any day that the Meyer-Sterner whey dryer baghouse is operated) to demonstrate compliance with the opacity limit Permit Condition. The inspection shall consist of a see/no see evaluation for the Meyer-Sterner whey dryer baghouse exhaust system. If any visible emissions are present from the Meyer-Sterner whey dryer baghouse exhaust system, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and opacity test and a description of the following: the permittee's 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.

[August 28, 2009]

### **2.7 Allowable Fuel**

To demonstrate compliance with the emissions limits Permit Condition the Meyer-Sterner whey dryer shall only combust natural gas as fuel.

## **Monitoring and Recordkeeping Requirements**

### **2.8 Dried Whey Powder Production Limits**

The permittee shall monitor and record the amount of dried whey powder produced by the Meyer-Sterner whey dryer on a daily basis, in lb/hr or T/day, in order to demonstrate compliance with the dried whey powder production limit Permit Condition. This requirement shall only apply during days that the Meyer-Sterner whey dryer is operated.

### **2.9 Recordkeeping**

The permittee shall comply with the recordkeeping requirements of General Provision 10.

## Performance Testing Requirements

### 2.10 Performance Test

The permittee shall conduct a performance test to measure PM10 emissions from the Meyer-Sterner whey plant dryer stack no later than February 18, 2018. This performance test, and any subsequent performance tests, shall be performed in accordance with IDAPA 58.01.01.157, General Provisions 7, 8, and 9 of this permit, and the following requirements:

**[March 13, 2014]**

- 2.10.1 Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.
- 2.10.2 The production rate of finished whey product in pounds per hour (lb/hr) from the Meyer-Sterner whey dryer shall be recorded during each performance test.
- 2.10.3 If the PM10 emissions measured in the performance test is less than or equal to 75 percent of the permitted PM10 emission limits in this permit, a source test shall be required every five years. If the PM10 emissions measured during the performance test is greater than 75 percent, but less than or equal to 90 percent of the permitted PM10 emission limit in this permit, a source test shall be required every three years after issuance of this permit. If the PM10 emissions measured during the performance test is greater than 90 percent of the permitted PM10 emission limit in this permit, the permittee shall conduct a performance test annually.

### 3 Natural Gas-Fired TetraPak Whey Dryer Operation

#### 3.1 Process Description

Dried whey powder will be manufactured in the TetraPak whey dryer process equipment. Up to 400,000 lb/day of (95.5 percent total solid) dried whey powder will be produced in this drying process.

The TetraPak whey dryer will receive whey concentrate at a rate up to 619,176 pounds per day (lb/day), assuming 62% solids content, from a new evaporator at the plant. The TetraPak whey drying process consists of two 12.5 MMBtu/hr natural gas fired burners, a drying chamber, and shaking beds. The two burners heat air that passes into the drying chamber to dry whey. The burners are considered indirect heating devices because the combustion gases do not come in contact with the heated air. Each burner has an exhaust stack (P-2 and P-3) that discharges natural gas combustion products. The heated air dries the whey concentrate as it flows through the drying chamber. The drying chamber exhausts to cyclones where product in air is recovered. The cyclones are considered as process equipment for this application. The purpose of this equipment is to recover solids suspended in air discharged from the dryer, the recovered solids are returned to the process line. The exhaust from the cyclones passes through a venturi air scrubber (P-4) to control discharge of particulate matter from this process. Product from the drying chamber passes over a conditioning belt onto a shaking bed and then to storage silos. Exhaust air from the shaking bed passes through a baghouse (P-5) to recover product and control discharge of particulate matter to the air. The proposed natural gas-fired dryer burners (P-2 and P-3) combust natural gas exclusively and are rated at less than 50 MMBtu/hr of heat input. Therefore, the dryer burners are exempt from State of Idaho air permit requirements per IDAPA 58.01.01.222.02.c.

#### 3.2 Control Device Descriptions

**Table 3.1 Natural Gas-Fired TetraPak Whey Dryer Operation Description**

Emissions Units / Processes	Control Devices	Emission Points
<u>TetraPak Whey Dryer Burner #1/P2</u> Manufacturer: Eclipse Burner Model: Eclipse Winnox 1000 Manufacture Date 2009 Heat Input Rating: 12.5 MMBtu/hr	N/A	P-2
<u>TetraPak Whey Dryer Burner #2/P3</u> Manufacturer: Eclipse Burner Model: Eclipse Winnox 1000 Manufacture Date 2009 Heat Input Rating: 12.5 MMBtu/hr	N/A	P-3
<u>TetraPak Drying Chamber/P4</u> Manufacturer: TetraPak Manufacture Date: 2009 Max Production: 16,667 lbs/hr Fuel: natural gas only	<u>Whey Dryer Scrubber</u> Manufacturer: Fister Klosterman Inc Model: MS-1200 Scrubber SS316 PM/PM <sub>10</sub> Efficiency: 99%	P-4
<u>TetraPak Shaking Beds/P5</u> Manufacturer: TetraPak Manufacture Date: 2009 Max Production: 16,667 lbs/hr Fuel: natural gas only	<u>Shaking Bed Baghouse</u> Manufacturer: TetraPak CPS Model: 13-243-14 Type: Reverse Air Jet Number of Bags: 243 Air to Cloth Ratio: 7.48 to 1 Baghouse Control Efficiency: 99.9%	P-5

[August 28, 2009]

## Emission Limits

### 3.3 Emission Limits

The PM<sub>10</sub>, NO<sub>x</sub>, and CO emissions from the TetraPak Whey Dryer Burner #1 and #2, TetraPak Whey Dryer Scrubber, and the TetraPak Shaking Bed Baghouse stacks shall not exceed any corresponding emissions rate limits listed in Table 3.2.

**Table 3.2 TetraPak Whey Dryer Burner #1 and #2, TetraPak Whey Dryer Scrubber, and the TetraPak Shaking Bed Baghouse Emission Limits**

Source Description	PM <sub>10</sub> <sup>(b)</sup>		NO <sub>x</sub>		CO	
	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>	lb/hr <sup>(c)</sup>	T/yr <sup>(d)</sup>
TetraPak Whey Dryer Burner #1	0.09	0.41	0.50	2.19	3.89	17.05
TetraPak Whey Dryer Burner #2	0.09	0.41	0.50	2.19	3.89	17.05
TetraPak Whey Dreyer Scrubber	5.66	24.79	N/A	N/A	N/A	N/A
TetraPak Shaking Bed Baghouse	3.32	14.54	N/A	N/A	N/A	N/A

- a In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- b Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- c Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
- d Tons per any consecutive 12-calendar month period.

[DRAFT]

### 3.4 Opacity Limit

Emissions from the TetraPak Whey Dryer Burner #1 and #2, TetraPak Whey Dryer Scrubber, and the TetraPak Shaking Bed Baghouse stacks, or any other stack, vent, or functionally equivalent opening associated with the TetraPak Whey Dryer Burner #1, #2, TetraPak Whey Dryer Scrubber, and the TetraPak Shaking Bed Baghouse, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[August 28, 2009]

### 3.5 Grain Loading Limit

The permittee shall not discharge to the atmosphere from the TetraPak Whey Dryer Burner #1 and #2 stacks PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gaseous fuels, as required by IDAPA 58.01.01.676.

[DRAFT]

## Operating Requirements

### 3.6 Dried Whey Powder Production Limit

To demonstrate compliance with the PM<sub>10</sub> emissions limits Permit Condition the maximum amount of dried whey powder produced by the TetraPak whey dryer operation shall not exceed 16,667 pounds per hour (lb/hr), based on a 24-hour average, or 200 tons per day (T/day).

[August 28, 2009]

### 3.7 TetraPak Shaking Bed Baghouse System

The permittee shall monitor and record visible emissions from the TetraPak shaking bed baghouse system once per day when operating (for any day that the TetraPak shaking bed baghouse is operated) to demonstrate compliance with the opacity limit Permit Condition. The

inspection shall consist of a see/no see evaluation for the TetraPak shaking bed baghouse exhaust system. If any visible emissions are present from the TetraPak shaking bed baghouse exhaust system, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and opacity test and a description of the following: the permittee's 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.

[August 28, 2009]

### **3.8 Whey Dryer Scrubber Requirements**

The scrubber's operating parameters shall be maintained as follows:

- The pressure drop across the scrubber shall be maintained at or above 5.25 inches of water gauge.
- The scrubbing liquid flow rate shall be equal to or greater than 599 gallons per minute.

[DRAFT]

### **3.9 Allowable Fuel**

To demonstrate compliance with the emissions limits Permit Condition the TetraPak whey dryer shall only combust natural gas as fuel.

[August 28, 2009]

## **Monitoring and Recordkeeping Requirements**

### **3.10 Production Monitoring**

The permittee shall monitor and record the amount of dried whey powder produced by the TetraPak whey dryer on a daily basis, in lb/hr or T/day, in order to demonstrate compliance with the dried whey powder production limit Permit Condition. This requirement shall only apply during days that the TetraPak whey dryer is operated.

[August 28, 2009]

### **3.11 Whey Dryer Scrubber Monitoring Requirements**

The permittee shall:

- Monitor and record the pressure loss of the gas stream through the scrubber in inches of water gauge once each day.
- Monitor and record the scrubbing media flow rate in gallons per minute once each day.

[DRAFT]

### **3.12 Recordkeeping**

The permittee shall comply with the recordkeeping requirements of General Provision 10.

[August 28, 2009]

## Performance Testing Requirements

### 3.13 Performance Test

The permittee shall conduct a performance test to measure PM<sub>10</sub> emissions from the TetraPak whey dryer shaking bed baghouse not later than May 24, 2021 to show compliance with the PM<sub>10</sub> emission rate limit. The permittee shall conduct a performance test to measure PM<sub>10</sub> emissions from the TetraPak whey dryer scrubber not later than October 1, 2017 to show compliance with the PM<sub>10</sub> emission rate limit. Performance tests shall be performed in accordance with IDAPA 58.01.01.157, General Provisions 7, 8, and 9 of this permit, and the following requirements:

[DRAFT]

- 3.13.1 Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.
- 3.13.2 The production rate of finished whey product in pounds per hour (lb/hr) from the TetraPak whey dryer operation shall be recorded during each performance test.
- 3.13.3 If the PM<sub>10</sub> emissions measured in the performance test is less than or equal to 75 percent of the permitted PM<sub>10</sub> emission limits in this permit, a source test shall be required every five years. If the PM<sub>10</sub> emissions measured during the performance test is greater than 75 percent, but less than or equal to 90 percent of the permitted PM<sub>10</sub> emission limit in this permit, a source test shall be required every three years after issuance of this permit. If the PM<sub>10</sub> emissions measured during the performance test is greater than 90 percent of the permitted PM<sub>10</sub> emission limit in this permit, the permittee shall conduct a performance test annually.

[August 28, 2009]

## 4 Four Full-Time Natural Gas-Fired Boilers

### 4.1 Process Description

Four boilers provide steam and hot water to the cheese manufacturing process at the facility. The four boilers combust natural gas exclusively and are all rated at less than 50 MMBtu/hr of heat input. Therefore, the four boilers are only subject to generally applicable State of Idaho air permit requirements per IDAPA 58.01.01.222.02.c. In addition, the four boilers are subject to NSPS, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

### 4.2 Control Device Descriptions

Table 4.1 Four Full-Time Natural Gas-Fired Boilers Description

Emissions Units / Processes	Control Devices	Emission Points
Cleaver-Brooks Boiler	N/A	Exhaust stack P-6
Superior Boiler	N/A	Exhaust stack P-7
Cleaver-Brooks Boiler	N/A	Exhaust stack P-8
Hurst Boiler	N/A	Exhaust stack P-9

[August 28, 2009]

## Emission Limits

### 4.3 Opacity Limit

Emissions from the two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler stacks, or any other stack, vent, or functionally equivalent opening associated with the two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[August 28, 2009]

### 4.4 Grain Loading Limit

The permittee shall not discharge to the atmosphere from the two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler stacks PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gaseous fuels, as required by IDAPA 58.01.01.676.

## Operating Requirements

### 4.5 Allowable Fuel

The two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler shall only combust natural gas as fuel.

[August 28, 2009]

## Monitoring and Recordkeeping Requirements

### 4.6 NSPS-Subpart Dc Recordkeeping Requirements

In accordance with 40 CFR 60.48c(g) and 40 CFR 60.48c(i), the permittee shall record and maintain records of the amount of each fuel combusted during each operating day by the two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler.

As an alternative to meeting the daily requirements, the permittee may elect to record and maintain records of the amount of each fuel combusted by the two Cleaver-Brooks boilers, the Superior boiler, and the Hurst boiler during each calendar month.

As an alternative to meeting the daily requirements, the permittee may elect to record and maintain records of the total amount of fuel delivered to that property during each calendar month.

[August 28, 2009]

#### 4.7 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standard of Performance for New Stationary Sources (NSPS), 40 CFR Part 63.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[August 28, 2009]

#### 4.8 40 CFR 60, Subpart A – General Provisions

The permittee shall comply with the following applicable requirements of 40 CFR 60, Subpart A – General Provisions.

**Table 4.2 SUBPART A – GENERAL PROVISIONS**

Section	Section Title	Summary of Section Requirements
60.4	Address	<ul style="list-style-type: none"> <li>• All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart(s) shall be submitted to:            Director Air and Waste      Department of Environmental Quality            US EPA      Boise Regional Office            1200 Sixth Avenue      1445 N. Orchard            Seattle, WA 98101      Boise, ID 83706-2239</li> </ul>
61.05	Prohibited Activities	<ul style="list-style-type: none"> <li>• No permittee shall construct or modify any stationary source subject to a standard without first obtaining written approval in accordance with 40 CFR 61.05.</li> </ul>
61.07	Application for approval of construction or modification	<ul style="list-style-type: none"> <li>• The permittee shall submit an application for approval of the construction of any new source or modification of any existing source in accordance with 40 CFR 61.07. The application shall be submitted before the construction or modification is planned to commence.</li> </ul>
61.09	Notification of startup	<ul style="list-style-type: none"> <li>• The permittee shall furnish written notification of the anticipated date of initial startup of each source not more than 60 days nor less than 30 days before that date, and notification of the actual date of initial startup of each source within 15 days after that date.</li> </ul>
61.15	Modification	<ul style="list-style-type: none"> <li>• A physical or operational change to a stationary source which results in an increase in the emission rate to the atmosphere of a hazardous pollutant to which a standard applies shall be considered a modification, and upon modification an existing source shall become a new source in accordance with the requirements and exemptions in 40 CFR 61.15.</li> </ul>
61.19	Circumvention	<ul style="list-style-type: none"> <li>• No permittee shall build, erect, install or use any article machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.</li> </ul>

[August 28, 2009]

#### **4.9 Recordkeeping Requirement**

All records required under this section shall be maintained by the permittee for a period of two years following the date of such record.

[August 28, 2009]

# 5 Emergency IC Engine

## General Requirements

### 5.1 When do I have to comply with this subpart

In accordance with 40 CFR 63.6595, on and after May 3, 2013 the permittee shall comply with the applicable emission limitations, operating limitations, and other requirements of t 40 CFR 63 subpart ZZZZ.

[DRAFT]

## Operating Requirements

### 5.2 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

In accordance with 40 CFR 63.6603, the permittee shall comply with the requirements in Table 2d to this subpart. They are listed as follows:

- Change oil and filter every 500 hours of operation or annually, whichever comes first
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[DRAFT]

### 5.3 What are my general requirements for complying with this subpart?

In accordance with 40 CFR 63.6605(a), the permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the permittee at all times.

[DRAFT]

In accordance with 40 CFR 63.6605(b), the permittee shall at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[DRAFT]

### 5.4 What are my monitoring, installation, collection, operation, and maintenance requirements?

- 5.4.1 In accordance with 40 CFR 63.6625(e), the permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[DRAFT]

5.4.2 In accordance with 40 CFR 63.6625(f), the permittee shall install a non-resettable hour meter if one is not already installed.

[DRAFT]

5.4.3 In accordance with 40 CFR 63.6625(h), the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

[DRAFT]

5.4.4 In accordance with 40 CFR 63.6625(i), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[DRAFT]

## Compliance Requirements

### 5.5 Continuous compliance

In accordance with 40 CFR 63.6640(f), in order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- There is no time limit on the use of emergency stationary RICE in emergency situations.
- Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
- Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance

and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[DRAFT]

## Reporting Requirements

### 5.6 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

- In accordance with 40 CFR 63.6640(b), the permittee shall report each instance in which you did not meet each emission limitation or operating limitation in Table 2d as listed under the What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
- In accordance with 40 CFR 63.6640(e), the permittee shall report each instance in which the permittee did not meet the requirements in Table 8 to this subpart that apply to the permittee.

[DRAFT]

### 5.7 What notifications must I submit and when?

In accordance with 40 CFR 63.6645(a), the permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

[DRAFT]

## Recordkeeping Requirements

### 5.8 What records must I keep?

- In accordance with 40 CFR 63.6655 (d), the permittee shall keep the records of working practice as required in 40 CFR 63.6640 (a) or 40 CFR 63.6625 (e).
- In accordance with 40 CFR 63.6655(e), the permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan.

[DRAFT]

### 5.9 In what form and how long must I keep my records?

In accordance with 40 CFR 63.6660,

- The records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[DRAFT]

## **Other Requirements**

### **5.10 What parts of the General Provisions apply to me?**

In accordance with 40 CFR 63.6665, the permittee is subject to the General provisions as listed in Table 8 of this subpart.

**[DRAFT]**

## 6 General Provisions

### General Compliance

**6.1** The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the “Rules for the Control of Air Pollution in Idaho.” The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the “Rules for the Control of Air Pollution in Idaho,” and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

**6.2** The permittee shall at all times (except as provided in the “Rules for the Control of Air Pollution in Idaho”) maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

**6.3** Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

### Inspection and Entry

**6.4** Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee’s premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

### Construction and Operation Notification

**6.5** This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

**6.6** The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

## Performance Testing

**6.7** If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

**6.8** All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

**6.9** Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

## Monitoring and Recordkeeping

**6.10** The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

## **Excess Emissions**

- 6.11** The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

## **Certification**

- 6.12** All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—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(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

## **False Statements**

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

[IDAPA 58.01.01.125, 3/23/98]

## **Tampering**

- 6.14** No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

## **Transferability**

- 6.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

## **Severability**

- 6.16** The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]