



January 11, 2023

Ms. Courtney Valero, Environmental Coordinator  
Frito-Lay, Inc.  
4808 Fruit Valley Road  
Vancouver, WA 98660

Subject: Final Air Discharge Permit for Modification of Dust Collector Requirements

Dear Ms. Valero:

A final determination to issue Air Discharge Permit 23-3558 (ADP 23-3558) has been completed for Air Discharge Permit (ADP) Application CL-3217 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for ADP Application CL-3217 was published in the permit section of SWCAA's internet website on November 23, 2022. SWCAA did not receive a request for a public comment period in response to the public notice and has concluded that significant public interest does not exist for this determination. Therefore, a public comment period will not be provided for this permitting action. Electronic copies of ADP 23-3558 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (<http://www.swcleanair.gov/permits/adpfinal.asp>). Original copies are enclosed for your files.

This Air Discharge Permit may be appealed directly to the Pollution Control Hearings Board (PCHB) at P.O. Box 40903, Olympia, Washington 98504-0903 within 30 days of receipt as provided in RCW 43.21B.

If you have any comments, or desire additional information, please contact me or Wess Safford at (360) 574-3058, extension 126.

Sincerely,

Uri Papish  
Executive Director

UP:wls

Enclosure – Air Discharge Permit 23-3558 and Technical Support Document





**AIR DISCHARGE PERMIT  
23-3558**

**Issued: January 11, 2023**

Frito-Lay - Vancouver  
4808 Fruit Valley Road, Vancouver, WA 98660

SWCAA ID - 448



REVIEWED BY:

*Clinton H. Lamoreaux*  
Clinton Lamoreaux, Chief Engineer

APPROVED BY:

*Uri Papish*  
Uri Papish, Executive Director

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**1. Equipment/Activity Identification**

<b>ID No.</b>	<b>Equipment/Activity</b>	<b>Control Measure/Equipment</b>
1	PCA / Heat Exchanger (North American – 26.4 MMBtu/hr)	Low Sulfur Fuel
2	PCA / Fryer	Wet Counter-Current Scrubber (5,320 acfm)
3	PCB-32 / Heat Exchanger (North American – 24.0 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel
4	PCB-32 / Fryer	Wet Venturi Scrubber (11,500 acfm)
5	FCC-1 / Heat Exchanger (Eclipse – 2.5 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel
6	FCC-1 / Fryer	Oil/Mist Eliminator
7	FCC-2 / Heat Exchanger (Eclipse – 2.5 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel
8	FCC-2 / Fryer	Oil/Mist Eliminator
9	TC-2 / Heat Exchanger & Fryer (Eclipse - 3.4 MMBtu/hr)	Low Sulfur Fuel, Thermal Oxidation
10	TC-2 / Oven (6.992 MMBtu/hr)	Low Sulfur Fuel
11	TC-3 / Heat Exchanger & Fryer (Eclipse - 3.4 MMBtu/hr)	Low Sulfur Fuel, Thermal Oxidation
12	TC-3 / Oven #1 (6.992 MMBtu/hr)	Low Sulfur Fuel
13	TC-3 / Oven #2 (6.992 MMBtu/hr)	Low Sulfur Fuel
14	FCP / Heat Exchanger (Eclipse - 1.2 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel
15	FCP / Fryer	Oil/Mist Eliminator
16	FCP / Extruders	Roto-clone
17	BCP / Oven (1.2 MMBtu/hr)	Low Sulfur Fuel
18	CP1 / Popcorn Oven (1.141 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel
19	Process Boiler (Hurst – 16.8 MMBtu/hr)	Low NO <sub>x</sub> Burner, Low Sulfur Fuel, Flue Gas Recirculation
20	Corn Transfer System – Railcar Unloading Segment 1	Equipment Enclosure, Dust Collector (1,915 acfm)
21	Corn Transfer System – Railcar Unloading Segment 2	Equipment Enclosure, Dust Collector (160 acfm)
22	Corn Transfer System - Corn Silo Vents	Equipment Enclosure, Dust Collector (1,915 acfm)
23	Corn Transfer System – Primary Handling	Equipment Enclosure, Baghouse (5,000 acfm)

<b>ID No.</b>	<b>Equipment/Activity</b>	<b>Control Measure/Equipment</b>
24	Corn Transfer System – Corn Chip Lines	Equipment Enclosure, Cartridge Collector (894 acfm)
25	Cornmeal Transfer System – Railcar Receiving	Equipment Enclosure, Baghouse (625 acfm)
26	Cornmeal Transfer System – Storage Silos	Equipment Enclosure, Baghouse (383 acfm)
27	Cornmeal Transfer System – Metering Bins	Equipment Enclosure, Baghouse (239 acfm)
28	Space Heaters (combined 18.7 MMBtu/hr)	Low Sulfur Fuel

## 2. Approval Conditions

The following tables detail the specific requirements of this permit. In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations. The permit requirement number is identified in the left-hand column. The text of the permit requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit requirement applies is listed in the right-hand column.

ADP 23-3558 supersedes ADP 21-3473 in its entirety.

### Emission Limits

<b>Req. No.</b>	<b>Emission Limits</b>	<b>Equipment/Activity ID No.</b>										
1.	Emission concentration from the PCA heat exchanger must not exceed: <table border="0"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Concentration Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>90 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> <tr> <td>CO</td> <td>30 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Concentration Limit</u>	NO <sub>x</sub>	90 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	CO	30 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	1				
<u>Pollutant</u>	<u>Concentration Limit</u>											
NO <sub>x</sub>	90 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)											
CO	30 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)											
2.	Combined emissions from the PCA wet scrubber (heat exchanger/fryer) must not exceed: <table border="0"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>13.30 tpy</td> </tr> <tr> <td>CO</td> <td>2.70 tpy</td> </tr> <tr> <td>VOC</td> <td>0.90 tpy</td> </tr> <tr> <td>PM<sub>10</sub></td> <td>9.69 tpy</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO <sub>x</sub>	13.30 tpy	CO	2.70 tpy	VOC	0.90 tpy	PM <sub>10</sub>	9.69 tpy	1-2
<u>Pollutant</u>	<u>Emission Limit</u>											
NO <sub>x</sub>	13.30 tpy											
CO	2.70 tpy											
VOC	0.90 tpy											
PM <sub>10</sub>	9.69 tpy											
3.	Emissions from the PCB-32 heat exchanger must not exceed: <table border="0"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>4.82 tpy 30 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> <tr> <td>CO</td> <td>3.88 tpy 50 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO <sub>x</sub>	4.82 tpy 30 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	CO	3.88 tpy 50 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	3				
<u>Pollutant</u>	<u>Emission Limit</u>											
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<b>Req. No.</b>	<b>Emission Limits</b>	<b>Equipment/ Activity ID No.</b>
4.	Emissions from the PCB-32 wet scrubber must not exceed: <u>Pollutant</u> <u>Emission Limit</u> VOC                                      2.75 tpy PM <sub>10</sub> 3.40 tpy	4
5.	Emissions from the FCC-1 heat exchanger must not exceed: <u>Pollutant</u> <u>Emission Limit</u> NO <sub>x</sub> 0.33 tpy 25 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas) CO    0.97 tpy 120 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	5
6.	Emissions from the FCC-1 fryer must not exceed: <u>Pollutant</u> <u>Emission Limit</u> PM <sub>10</sub> 1.12 tpy VOC    0.18 tpy	6
7.	Emissions from the FCC-2 heat exchanger must not exceed: <u>Pollutant</u> <u>Emission Limit</u> NO <sub>x</sub> 0.33 tpy 25 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas) CO    0.97 tpy 120 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	7
8.	Emissions from the FCC-2 fryer must not exceed: <u>Pollutant</u> <u>Emission Limit</u> PM <sub>10</sub> 1.12 tpy VOC    0.18 tpy	8
9.	Combined emissions from the TC-2 line oven, fryer, and heat exchanger must not exceed the following: <u>Pollutant</u> <u>Emission Limit</u> NO <sub>x</sub> 4.43 tpy CO    21.66 tpy PM <sub>10</sub> 0.52 tpy VOC    0.38 tpy	9-10
10.	Combined emissions from the TC-3 line ovens, fryer, and heat exchanger must not exceed the following: <u>Pollutant</u> <u>Emission Limit</u> NO <sub>x</sub> 7.07 tpy CO    34.53 tpy PM <sub>10</sub> 0.75 tpy VOC    0.54 tpy	11-13
11.	Emission concentrations from the FCP heat exchanger must not exceed: <u>Pollutant</u> <u>Emission Limit</u> NO <sub>x</sub> 30 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas) CO    150 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	14

Req. No.	Emission Limits	Equipment/ Activity ID No.												
12.	Combined emissions from the FCP line fryer and heat exchanger must not exceed the following: <table border="0" data-bbox="269 310 756 527"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>0.19 tpy</td> </tr> <tr> <td>CO</td> <td>0.58 tpy</td> </tr> <tr> <td>PM<sub>10</sub></td> <td>0.30 tpy</td> </tr> <tr> <td>VOC</td> <td>0.44 tpy</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>0.01 tpy</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO <sub>x</sub>	0.19 tpy	CO	0.58 tpy	PM <sub>10</sub>	0.30 tpy	VOC	0.44 tpy	SO <sub>2</sub>	0.01 tpy	14-15
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VOC	0.44 tpy													
SO <sub>2</sub>	0.01 tpy													
13.	PM <sub>10</sub> emissions from the extruder rotoclone on the FCP production line must not exceed 0.08 tpy.	16												
14.	Emissions from the CP1 popcorn oven must not exceed the following: <table border="0" data-bbox="269 678 927 894"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>0.47 tpy 75 ppmv @ 3% O<sub>2</sub> (nat gas)</td> </tr> <tr> <td>CO</td> <td>0.79 tpy 225 ppmv @ 3% O<sub>2</sub> (nat gas)</td> </tr> <tr> <td>PM<sub>10</sub></td> <td>0.04 tpy</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO <sub>x</sub>	0.47 tpy 75 ppmv @ 3% O <sub>2</sub> (nat gas)	CO	0.79 tpy 225 ppmv @ 3% O <sub>2</sub> (nat gas)	PM <sub>10</sub>	0.04 tpy	18				
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PM <sub>10</sub>	0.04 tpy													
15.	Air contaminant emissions from the CP1 production line must be contained within the building envelope with 0% opacity from the room exhaust.	18												
16.	Emissions from the Hurst process boiler must not exceed the following: <table border="0" data-bbox="269 1052 1029 1339"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO<sub>x</sub></td> <td>2.66 tpy 30 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> <tr> <td>CO</td> <td>2.65 tpy 50 ppmv @ 3% O<sub>2</sub> (1 hr avg, nat gas)</td> </tr> <tr> <td>PM<sub>10</sub></td> <td>0.55 tpy</td> </tr> <tr> <td>VOC</td> <td>0.40 tpy</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>0.11 tpy</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO <sub>x</sub>	2.66 tpy 30 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	CO	2.65 tpy 50 ppmv @ 3% O <sub>2</sub> (1 hr avg, nat gas)	PM <sub>10</sub>	0.55 tpy	VOC	0.40 tpy	SO <sub>2</sub>	0.11 tpy	19
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PM <sub>10</sub>	0.55 tpy													
VOC	0.40 tpy													
SO <sub>2</sub>	0.11 tpy													
17.	PM <sub>10</sub> emission concentrations from the corn receiving and storage dust collectors must not exceed 0.005 gr/dscf. PM <sub>10</sub> emissions from each unit must not exceed the following: <table border="0" data-bbox="269 1472 935 1619"> <thead> <tr> <th><u>Unit</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Railcar Unloading Segment 1</td> <td>0.36 tpy</td> </tr> <tr> <td>Railcar Unloading Segment 2</td> <td>0.10 tpy</td> </tr> <tr> <td>Corn Silo Vent</td> <td>0.36 tpy</td> </tr> </tbody> </table>	<u>Unit</u>	<u>Emission Limit</u>	Railcar Unloading Segment 1	0.36 tpy	Railcar Unloading Segment 2	0.10 tpy	Corn Silo Vent	0.36 tpy	20-22				
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18.	PM <sub>10</sub> emission concentrations from the corn transfer system dust collectors must not exceed 0.005 gr/dscf. PM <sub>10</sub> emissions from each unit must not exceed the following: <table border="0" data-bbox="269 1745 935 1850"> <thead> <tr> <th><u>Unit</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Primary Handling</td> <td>0.94 tpy</td> </tr> <tr> <td>Corn Chip Lines</td> <td>0.17 tpy</td> </tr> </tbody> </table>	<u>Unit</u>	<u>Emission Limit</u>	Primary Handling	0.94 tpy	Corn Chip Lines	0.17 tpy	23-24						
<u>Unit</u>	<u>Emission Limit</u>													
Primary Handling	0.94 tpy													
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<b>Req. No.</b>	<b>Emission Limits</b>	<b>Equipment/ Activity ID No.</b>								
19.	PM <sub>10</sub> emission concentrations from the corn meal transfer system baghouses must not exceed 0.005 gr/dscf. PM <sub>10</sub> emissions from each unit must not exceed the following: <table border="0"> <tr> <td><u>Unit</u></td> <td><u>Emission Limit</u></td> </tr> <tr> <td>Railcar Receiving</td> <td>0.12 tpy</td> </tr> <tr> <td>Storage Silos</td> <td>0.07 tpy</td> </tr> <tr> <td>Metering Bins</td> <td>0.05 tpy</td> </tr> </table>	<u>Unit</u>	<u>Emission Limit</u>	Railcar Receiving	0.12 tpy	Storage Silos	0.07 tpy	Metering Bins	0.05 tpy	25-27
<u>Unit</u>	<u>Emission Limit</u>									
Railcar Receiving	0.12 tpy									
Storage Silos	0.07 tpy									
Metering Bins	0.05 tpy									
20.	Air contaminant emissions from the emission units listed below must not exceed the cited opacity levels for more than 3 minutes in any one hour period as determined by a Certified Observer in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400): <table border="0"> <tr> <td><u>Emission Unit</u></td> <td><u>Opacity Limit</u></td> </tr> <tr> <td>FCC fryer exhausts</td> <td>15%</td> </tr> <tr> <td>All other exhaust points</td> <td>0%</td> </tr> </table>	<u>Emission Unit</u>	<u>Opacity Limit</u>	FCC fryer exhausts	15%	All other exhaust points	0%	1-17, 19-27		
<u>Emission Unit</u>	<u>Opacity Limit</u>									
FCC fryer exhausts	15%									
All other exhaust points	0%									

### Operating Limits and Requirements

<b>Req. No.</b>	<b>Operating Limits and Requirements</b>	<b>Equipment/ Activity ID No.</b>
21.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facility-wide
22.	The permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum.	Facility-wide
23.	Each pollution control device/measure must be in use whenever the associated production equipment is in operation. Control devices must be operated and maintained in accordance with the manufacturer's specifications and operated in a manner that minimizes emissions.	1-27
24.	Emission units identified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.	1-27
25.	The PCA and PCB-32 heat exchangers must only be fired on natural gas or propane. Operation of each heat exchanger on propane must not exceed 500 hr/yr.	1, 3
26.	Pressure gauges must be installed and maintained to measure the differential pressure across the PCA and PCB-32 wet scrubbers.	2, 4
27.	Combustion equipment is approved to fire on natural gas and propane only. Propane is approved as a back-up fuel, and may only be fired if natural gas service is interrupted.	5, 7, 9-14, 19
28.	Exhaust air from approved equipment must be discharged vertically into the ambient air. Any device that obstructs or prevents vertical discharge is prohibited.	5-9, 11, 14-15



<b>Req. No.</b>	<b>Operating Limits and Requirements</b>	<b>Equipment/ Activity ID No.</b>
29.	Corrective action must be taken within 7 days if emission monitoring results for the production line heat exchangers indicate emission concentrations in excess of permitted emission limits. Corrective action includes, but is not limited to, service by maintenance personnel or retesting for each pollutant of concern using a reference test method. Corrective action must be pursued until observed emission concentrations no longer exceed permitted emission limits.	5, 7, 14
30.	The combustion chamber temperature set point of the TC-2 and TC-3 heat exchangers must be maintained at $\geq 1400^{\circ}\text{F}$ whenever the associated fryers are operating.	9, 11
31.	The CP1 popcorn oven must only be fired on natural gas or propane. Operation on propane must not exceed 500 hr/yr.	18
32.	Differential pressure in the fuel gas and combustion air manifolds of the CP1 popcorn oven must be maintained within the operating range specified by the manufacturer.	18
33.	Exhaust gases from the Hurst process boiler must be discharged vertically at a minimum height of 39 ft. Any rain cap that inhibits vertical discharge is prohibited.	19
34.	The corn transfer system dust collectors must be in operation at all times during material unloading, transfer and cleaning.	23-24
35.	Differential pressure gauges must be installed and maintained on each material transfer dust collector.	20-22, 25-27

### Monitoring and Recordkeeping Requirements

<b>Req. No.</b>	<b>Monitoring and Recordkeeping Requirements</b>	<b>Equipment/ Activity ID No.</b>
36.	All air quality related complaints, including odor complaints, received by the permittee and the results of any subsequent investigation or corrective action must be recorded for each occurrence.	Facility-wide
37.	With the exception of data logged by a computerized data acquisition system, each record required by this Permit must include the date and the name of the person making the record entry. If a control device or process is not operating during a specific time period, a record must be made to that effect.	1-28
38.	All records required by this Permit must be kept for a minimum period of no less than three years and must be maintained in a form readily available for inspection by SWCAA representatives.	1-28
39.	Excess emissions and upset conditions must be recorded for each occurrence.	1-28

<b>Req. No.</b>	<b>Monitoring and Recordkeeping Requirements</b>	<b>Equipment/ Activity ID No.</b>
40.	Operational data for the PCA and PCB-32 production lines must be recorded as follows: (a) Scrubber differential pressure recorded monthly. Recording frequency must change to weekly for the two month period immediately after a scrubber upset, (b) Product throughput recorded monthly, (c) Fuel consumption for approved equipment recorded monthly, (d) Hours of operation recorded monthly, (e) Air emissions recorded annually, and (f) Maintenance and repair activities recorded for each occurrence.	1-4
41.	Operational data for the FCC-1 and FCC-2 production lines must be recorded as follows: (a) Product throughput for each line recorded monthly, (b) Fuel consumption for approved equipment recorded monthly, (c) Air emissions recorded annually, (d) Visual survey results recorded for each survey, and (e) Maintenance, repair, and testing activities recorded for each occurrence.	5-8
42.	Operational data for the TC-2 and TC-3 production lines must be recorded as follows: (a) Heat exchanger combustion chamber temperature and set-point recorded weekly, (b) Product throughput for each line recorded monthly, (c) Fuel consumption for approved equipment recorded monthly, (d) Air emissions recorded annually, and (e) Maintenance, repair, and testing activities recorded for each occurrence.	9-13
43.	Operational data for the FCP production line must be recorded as follows: (a) Product throughput recorded monthly, (b) Fuel consumption for approved equipment recorded monthly, (c) Hours of operation recorded monthly, (d) Air emissions recorded annually, and (e) Maintenance, repair, and testing activities recorded for each occurrence.	14-16
44.	Operational data for the BCP production line must be recorded as follows: (a) Fuel consumption for approved equipment recorded monthly, (b) Air emissions recorded annually, and (c) Maintenance, repair, and testing activities recorded for each occurrence.	17
45.	Operational data for the CP1 production line must be recorded as follows: (a) Fuel consumption recorded monthly, (b) Air emissions recorded annually, and (c) Maintenance and repair activities recorded for each occurrence.	18
46.	Operational data for the Hurst process boiler must be recorded as follows: (a) Fuel consumption recorded daily or as approved by SWCAA in writing, (b) Air emissions recorded annually, and (c) Maintenance activities recorded for each occurrence.	19

<b>Req. No.</b>	<b>Monitoring and Recordkeeping Requirements</b>	<b>Equipment/ Activity ID No.</b>
47.	Operational data for the corn receiving and storage dust collectors must be recorded as follows: (a) Hours of operation recorded monthly, (b) Air emissions recorded annually, and (c) Maintenance and repair activities recorded for each occurrence.	20-22
48.	Operational data for the corn transfer system dust collectors must be recorded as follows: (a) Hours of operation recorded monthly, (b) Air emissions recorded annually, and (c) Maintenance and repair activities recorded for each occurrence.	23-24
49.	Operational data for the cornmeal transfer system baghouses must be recorded as follows: (a) Differential pressure drop recorded weekly, (b) Hours of operation recorded monthly, (c) Air emissions recorded annually, and (d) Maintenance and repair activities recorded for each occurrence.	25-27
50.	Operational data for the Space Heaters must be recorded as follows: (a) Fuel consumption recorded monthly.	28

#### **Emission Monitoring and Testing Requirements**

<b>Req. No.</b>	<b>Emission Monitoring and Testing Requirements</b>	<b>Equipment/ Activity ID No.</b>						
51.	The Hurst process boiler must be emission tested no later than October 2018. Subsequent emission testing must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due. An alternative monitoring schedule may be employed if approved by SWCAA in writing. All emission testing must be conducted in accordance with Appendix A of this Permit.	19						
52.	The PCA and PCB-32 heat exchangers must be emission tested no later than the dates listed below. Subsequent emission testing for each unit must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due. An alternative monitoring schedule may be employed if approved by SWCAA in writing. All emission testing must be conducted in accordance with Appendix B of this Permit. <table border="0" style="margin-left: 40px;"> <tr> <td style="text-align: center;"><u>Emission Unit</u></td> <td style="text-align: center;"><u>Test Due</u></td> </tr> <tr> <td style="text-align: center;">PCA</td> <td style="text-align: center;">October 2018</td> </tr> <tr> <td style="text-align: center;">PCB-32</td> <td style="text-align: center;">October 2020</td> </tr> </table>	<u>Emission Unit</u>	<u>Test Due</u>	PCA	October 2018	PCB-32	October 2020	1, 3
<u>Emission Unit</u>	<u>Test Due</u>							
PCA	October 2018							
PCB-32	October 2020							
53.	Emission monitoring of the PCA, PCB-32, FCC-1, FCC-2, TC-2, TC-3, and FCP heat exchangers must be conducted no later than October 2018. Subsequent emission monitoring must be conducted on a 12 month cycle, no later than the end of October each year. An alternative monitoring schedule may be employed if approved by SWCAA in writing. All emission monitoring must be conducted in accordance with Appendix C of this Permit.	1, 3, 5, 7, 9, 11, 14						

<b>Req. No.</b>	<b>Emission Monitoring and Testing Requirements</b>	<b>Equipment/ Activity ID No.</b>
54.	The PCB-32 wet scrubber must be emission tested no later than October 2020. Subsequent emission testing must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due. An alternative monitoring schedule may be employed if approved by SWCAA in writing. All emission testing must be conducted in accordance with Appendix D of this Permit.	4
55.	Visible emission surveys of the FCC-1 and FCC-2 fryer exhausts must be conducted monthly and/or quarterly in accordance with Appendix E of this Permit.	6, 8
56.	Differential pressure monitoring of the CP1 popcorn oven must be conducted no later than the end of October 2017. Subsequent emission monitoring must be conducted on a 12 month cycle, no later than the end of October each year. An alternative monitoring schedule may be employed if approved by SWCAA in writing. All differential pressure monitoring must be performed in accordance with Appendix F of this Permit.	18
57.	The permittee must conduct initial and periodic emission testing of the Corn Silo Vent System dust collector as described in Appendix G of this Permit.	22

### Reporting Requirements

<b>Req. No.</b>	<b>Reporting Requirements</b>	<b>Equipment/ Activity ID No.</b>
58.	All air quality related complaints received by the permittee must be reported to SWCAA within three days of receipt. Complaint reports must include the following information: <ul style="list-style-type: none"> <li>(a) Date and time of the complaint;</li> <li>(b) Name of the complainant;</li> <li>(c) Nature of the complaint; and</li> <li>(d) Description of corrective action taken in response to complaint (if any).</li> </ul>	Facility-wide
59.	An annual emissions inventory report must be submitted in accordance with SWCAA 400-105(1). In addition to the emissions information required under SWCAA 400-105(1), each annual report must include an estimate of annual emission quantities for each TAP compound listed in the Technical Support Document for this Permit.	1-28
60.	Excess emissions must be reported to SWCAA as follows: <ul style="list-style-type: none"> <li>(a) As soon as possible, but no later than 12 hours after discovery for emissions that represent a potential threat to human health or safety;</li> <li>(b) As soon as possible, but no later than 48 hours after discovery for emissions which the permittee wishes to claim as unavoidable pursuant to SWCAA 400-107; and</li> <li>(c) No later than 30 days after the end of the month of discovery for all other excess emissions.</li> </ul>	1-28
61.	Emission test results must be reported to SWCAA in writing within 45 days of test completion.	1-3, 19, 22

<b>Req. No.</b>	<b>Reporting Requirements</b>	<b>Equipment/ Activity ID No.</b>
62.	Emission monitoring results must be reported to SWCAA in writing within 15 days of monitoring completion.	1, 3, 5, 7, 9, 11, 14
63.	Differential pressure monitoring results for the CP1 Popcorn Oven must be reported to SWCAA in writing within 15 days of monitoring completion.	18
64.	Visual survey results from the fryer exhausts on the FCC-1 and FCC-2 production lines must be reported to SWCAA in writing within 30 days of the end of each calendar quarter.	6, 8
65.	The following operational data for the PCA and PCB-32 production lines must be reported to SWCAA annually by March 15: (a) Product throughput, (b) Fuel consumption, (c) Hours of operation, (d) Monthly differential pressure readings from wet scrubbers, and (e) Air emissions.	1-4
66.	The following operational data for the FCC, TC, FCP, and BCP production lines must be reported to SWCAA annually by March 15: (a) Product throughput, (b) Fuel consumption, (c) Hours of operation, and (d) Air emissions.	5-17
67.	The following operational data for the Hurst process boiler and CP1 popcorn oven must be reported to SWCAA annually by March 15: (a) Fuel consumption, and (b) Air emissions.	18-19
68.	The following operational data for the corn receiving and storage dust collectors must be reported to SWCAA annually by March 15: (a) Hours of operation, and (b) Air emissions.	20-22
69.	The following operational data for the corn/cornmeal transfer system dust collectors must be reported to SWCAA annually by March 15: (a) Hours of operation, and (b) Air emissions.	23-27
70.	The following operational data for the Space Heaters must be reported to SWCAA annually by March 15: (a) Fuel consumption, and (b) Air emissions.	28

**3. General Provisions**

<b>Req. No.</b>	<b>General Provisions</b>
A.	For the purpose of ensuring compliance with this ADP, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the Permittee's premises and the facilities being constructed, owned, operated and/or maintained by the Permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this ADP and applicable regulations and to perform or require such tests as may be deemed necessary.
B.	The provisions, terms, and conditions of this ADP bind the Permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the Permittee.
C.	The requirements of this ADP survive any transfer of ownership of the source or any portion thereof.
D.	This ADP must be posted conspicuously at or be readily available near the source.
E.	This ADP will be invalidated, in whole or in part, if construction or installation of any new or modified equipment has not commenced within eighteen (18) months from date of issuance, if construction is discontinued for a period of eighteen (18) months or more without prior SWCAA approval, or if construction is not completed within a reasonable time.
F.	This ADP does not supersede requirements of other Agencies with jurisdiction and further, this ADP does not relieve the Permittee of any requirements of any other governmental Agency. In addition to this ADP, the Permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
G.	Compliance with the terms of this ADP does not relieve the Permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70A.15, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
H.	If any provision of this ADP is held to be invalid, all unaffected provisions of the ADP will remain in effect and be enforceable.
I.	No change in this ADP will be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the Permittee for the relief sought.
J.	The Southwest Clean Air Agency may, in accordance with RCW 70A.15, impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this ADP, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

## Appendix A

### Emission Testing Requirements

#### Hurst Process Boiler

#### 1. Introduction:

The purpose of this testing is to quantify emissions from the Hurst process boiler and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

#### 2. Testing Requirements:

- a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed of the test schedule at least 5 business days prior to testing so that a representative may be present during testing.
- b. **Testing schedule.** The Hurst process boiler must be emission tested no later than October 2018. Subsequent emission testing must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due.
- c. **Test runs/Reference test methods.** All sampling must take place at the boiler exhaust stack. A minimum of three (3) test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods identified below must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O <sub>2</sub> , CO <sub>2</sub> content	EPA Method 3 or 3A	60 minutes
Moisture content	EPA Method 4	60 minutes
NO <sub>x</sub>	EPA Method 7E	60 minutes
CO	EPA Method 10	60 minutes

#### 3. Source Operation:

- a. **Source operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include boiler fuel consumption, process startups and shutdowns, and plant adjustments. All recorded production parameters must be documented in the test results report.

**Appendix A**  
**Emission Testing Requirements**  
**Hurst Process Boiler**

**4. Reporting Requirements:**

- a. Test Report. Unless otherwise directed by SWCAA, a final test report must be prepared and submitted (hard copy and electronic) to SWCAA within forty-five (45) calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
  - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
  - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
  - (4) Summary of control system or equipment operating conditions,
  - (5) Summary of production related parameters cited in Section 3 above,
  - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
  - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
  - (8) Copies of field data and example calculations,
  - (9) Chain of custody information,
  - (10) Calibration documentation,
  - (11) Discussion of any abnormalities associated with the results, and
  - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. All test results must be corrected to 3% oxygen.

**5. Changes to Testing Requirements:**

The emission test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or to the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.



## Appendix B

### Emission Testing Requirements PCA / PCB-32 Heat Exchangers

#### 1. Introduction:

The purpose of this testing is to quantify emissions from the PCA and PCB-32 heat exchangers and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

#### 2. Testing Requirements:

- a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed of the test schedule at least 5 business days prior to testing so that a representative may be present during testing.
- b. **Testing schedule.** The PCA heat exchanger must be emission tested no later than the end of October 2018. The PCB-32 heat exchanger must be emission tested no later than the end of October 2020. Subsequent emission testing for both units must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due.
- c. **Test runs/Reference test methods.** Sampling must take place at the exhaust stack of each heat exchanger. A minimum of 3 test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods identified below must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O <sub>2</sub> , CO <sub>2</sub> content	EPA Method 3 or 3A	60 minutes
Moisture content	EPA Method 4	60 minutes
NO <sub>x</sub>	EPA Method 7E	60 minutes
CO	EPA Method 10	60 minutes
Opacity	SWCAA Method 9	6 minutes

#### 3. Source Operation:

- a. **Source operations.** Source operations during the emissions test must be representative of maximum intended operating conditions. Testing must be conducted while the equipment is firing on natural gas.
- b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include fuel consumption, process startups and shutdowns, product throughput, and plant adjustments. All recorded production parameters must be documented in the test results report.

**Appendix B**  
**Emission Testing Requirements**  
**PCA / PCB-32 Heat Exchangers**

**4. Reporting Requirements:**

- a. Test Report. Unless otherwise directed by SWCAA, a final test report must be prepared and submitted (hard copy and electronic) to SWCAA within forty-five (45) calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
  - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
  - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
  - (4) Summary of control system or equipment operating conditions,
  - (5) Summary of production related parameters cited in Section 3 above,
  - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
  - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
  - (8) Copies of field data and example calculations,
  - (9) Chain of custody information,
  - (10) Calibration documentation,
  - (11) Discussion of any abnormalities associated with the results, and
  - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. All test results must be corrected to 3% oxygen.

**5. Changes to Testing Requirements:**

The emission test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or to the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

## **Appendix C**

### **Emission Monitoring Requirements Production Line Heat Exchangers**

#### **1. Introduction:**

- a. The purpose of periodically monitoring the exhaust of the PCA, PCB-32, FCC-1, FCC-2, TC-2, TC-3, and FCP heat exchangers is to minimize emissions and provide a reasonable assurance that the equipment is operating properly.
- b. Periodic monitoring may be conducted with an electrochemical cell combustion analyzer, analyzers used for reference method testing, or other analyzers pre-approved by SWCAA.

#### **2. Monitoring Procedure:**

- a. Monitoring of all affected heat exchangers must be conducted no later than the end of October 2018. Subsequent emission monitoring must be conducted on a 12 month cycle, no later than the end of October each year. Each monitoring event must determine the emission concentrations of the following constituents:

Constituents to be Measured

Carbon Monoxide (CO)

Nitrogen Oxides (NO<sub>x</sub>)

Oxygen (O<sub>2</sub>)

- b. Production line operation during monitoring must be representative of maximum achievable operating conditions during that year.
- c. Alternative testing methodologies must be pre-approved by SWCAA.

#### **3. Minimum Quality Assurance/Quality Control Measures:**

- a. The analyzer(s) response to span gas of a known concentration must be determined before and after testing. No more than 12 hours may elapse between span gas response checks. The results of the analyzer response must not be valid if the pre and post response check results vary by more than 10% of the known span gas value.
- b. The CO and NO<sub>x</sub> span gas concentrations must be no less than 50% and no more than 200% of the emission concentration corresponding to the permitted emission limit. Ambient air may be used to zero the CO and NO<sub>x</sub> cells/analyzer(s) and span the oxygen cell/analyzer.
- c. Sampling must consist of at least 1 test consisting of at least 5 minutes of data collection following a "ramp-up phase." The "ramp-up phase" ends when analyzer readings have stabilized (less than 5% per minute change in emission concentration). Emission concentrations must be recorded at least once every 30 seconds during the data collection phase. All test data collected following the ramp-up phase(s) must be reported to SWCAA. A sample data sheet is attached for reference.

**Appendix C**  
**Emission Monitoring Requirements**  
**Production Line Heat Exchangers**

**4. Reporting Requirements:**

- a. All monitoring results must be recorded at the facility and reported to SWCAA in writing within 15 calendar days of completion. The following information must be included in the report:
  - (1) Time and date of the performance monitoring;
  - (2) Identification of the personnel involved;
  - (3) A summary of results, reported in units consistent with the applicable emission standard or limit;
  - (4) A summary of equipment operating conditions;
  - (5) A description of the evaluation methods or procedures used including all field data, quality assurance/quality control procedures and documentation; and
  - (6) Analyzer response check documentation.
- b. Reported monitoring results must be corrected to 3% O<sub>2</sub> in the exhaust gas and corrected for the analyzer response to zero and span gas.

**5. Changes to Monitoring Requirements:**

Emission monitoring must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the monitoring schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

## Appendix D

### Emission Testing Requirements PCB-32 Wet Scrubber

#### 1. Introduction:

The purpose of this testing is to quantify emissions from the PCB-32 wet scrubber and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

#### 2. Testing Requirements:

- a. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed of the test schedule at least 5 business days prior to testing so that a representative may be present during testing.
- b. **Testing schedule.** The PCB-32 wet scrubber must be emission tested no later than the end of October 2020. Subsequent emission testing must be conducted on a 5 year cycle, no later than the end of October of the year in which emission testing is due.
- c. **Test runs/Reference test methods.** A minimum of 3 test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods identified below must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O <sub>2</sub> , CO <sub>2</sub> content	EPA Method 3 or 3A	60 minutes
Moisture content	EPA Method 4	60 minutes
PM	EPA Method 5/202	60 minutes
VOC (initial test only)	EPA Method 25	60 minutes

#### 3. Source Operation:

- a. **Source operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of production parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include potato processing rate (lbs/hr), process startups and shutdowns, and plant adjustments. All recorded production parameters must be documented in the test results report.

**Appendix D**  
**Emission Testing Requirements**  
**PCB-32 Wet Scrubber**

**4. Reporting Requirements:**

- a. Test Report. Unless otherwise directed by SWCAA, a final test report must be prepared and submitted (hard copy and electronic) to SWCAA within forty-five (45) calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
  - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
  - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
  - (4) Summary of control system or equipment operating conditions,
  - (5) Summary of production related parameters cited in Section 3 above,
  - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
  - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
  - (8) Copies of field data and example calculations,
  - (9) Chain of custody information,
  - (10) Calibration documentation,
  - (11) Discussion of any abnormalities associated with the results, and
  - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. Test results must be reported in units of volume concentration (ppmv, gr/dscfm), gross emission rate (lb/hr), and process specific emission rate (lb/ton product).

**5. Changes to Testing Requirements:**

The emission test must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or to the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

## Appendix E

### Opacity Monitoring Requirements FCC-1 and FCC-2 Fryer Exhaust

#### 1. Introduction:

The purpose of this testing is to gather opacity data from the FCC-1 and FCC-2 fryer exhaust stacks for the purpose of ensuring continuing compliance with applicable emission limits.

#### 2. Testing Requirements:

- a. **Testing schedule.** Opacity observations must be made for each FCC fryer exhaust stack once per month. If, after 6 months of opacity observations, there are no more than 5 readings of 10% opacity (or greater) in any one-hour period and no complaints are received by SWCAA, the opacity monitoring frequency may be reduced to once per quarter. The implementation of the quarterly monitoring frequency may coincide with the completion of the first 6 months of data that meet this requirement. This monitoring schedule will revert to monthly if 5 or more readings of 10% opacity (or greater) are observed in any one-hour period, or if a citizen odor complaint is received by SWCAA. If the frequency reverts back to monthly, another 6 months of satisfactory monitoring will be required before the monitoring frequency may be reduced again.
- b. **Reference test method.** All opacity observations must be performed by a Certified Observer in accordance with SWCAA Method 9.
- c. **Test runs.** Opacity observations must be performed during daylight hours for a minimum of 60 minutes per emission point. After 6 months of satisfactory (< 5 opacity readings of 10% or greater in one hour) opacity readings may be reduced to a 6-minute period. For every opacity reading of 10 percent or greater in that 6 minute period, opacity must be read for an additional 6 minutes. For example, if a single reading of 15% opacity is made during the initial 6-minute observation period, then monitoring is required for an additional 6 minutes. If two readings of 10% opacity are recorded during the second observation period, two additional 6-minute observations will need to be performed. Observations continue in this manner until a maximum of 60 minutes of opacity observations have been recorded.

#### 3. Source Operation:

- a. **Source operations.** Source operations during the opacity monitoring must be representative of normal operating conditions.

#### 4. Reporting Requirements:

- a. All opacity observations must reported to SWCAA within 30 days of the end of each calendar quarter. Reports must, at a minimum, contain the following information
  - (1) Identification of each observed emission point,
  - (2) Time and date of the test,
  - (3) Identification and qualifications of test personnel,
  - (4) Summary of results, reported in % opacity, and
  - (5) Copies of field data and example calculations.

## Appendix F

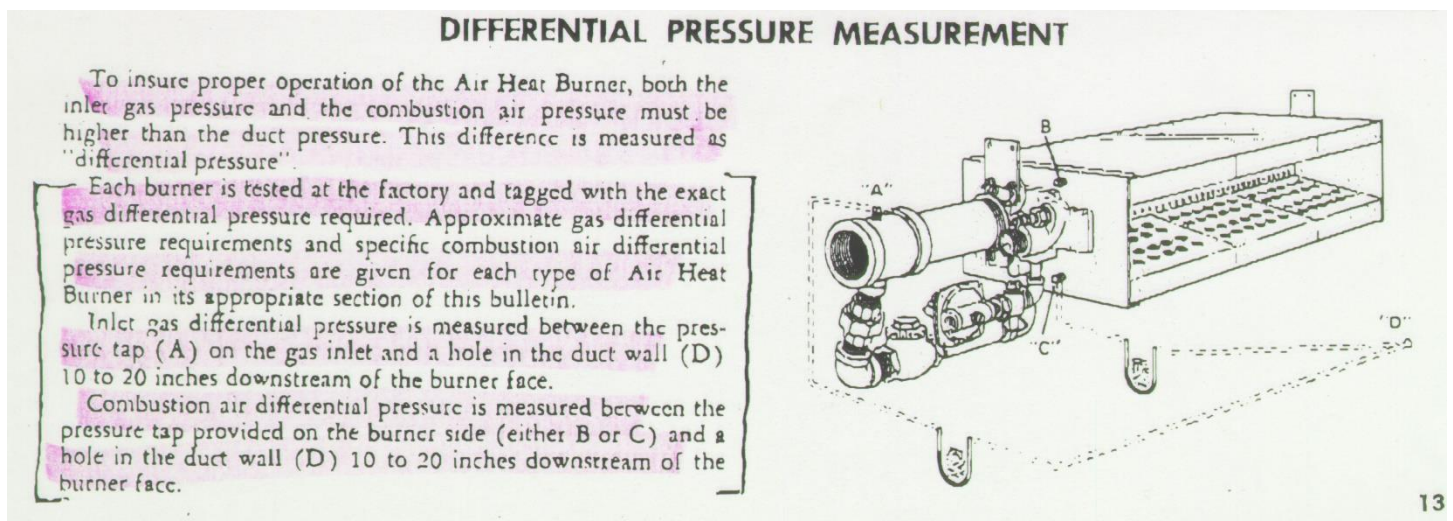
### Differential Pressure Monitoring Requirements CP1 Popcorn Oven

#### 1. Introduction:

The purpose of monitoring the differential pressure in the fuel gas and combustion air manifolds of the CP1 popcorn oven is to minimize air emissions and ensure proper operation on an ongoing basis.

#### 2. Testing Requirements:

- a. **Testing schedule.** Differential pressure in the fuel gas and combustion air manifolds of the CP1 popcorn oven must be monitored no later than the end of October 2017. Subsequent pressure monitoring must be conducted on a 12 month cycle, no later than the end of October each year.
- b. **Reference test method.** Differential pressure readings are to be taken as specified in the manufacturer's literature presented below.



#### 3. Source Operation:

- a. **Source operations.** Source operations during monitoring events must be representative of normal operating conditions.

#### 4. Reporting Requirements:

- a. All monitoring results must be recorded at the facility and reported to SWCAA in writing within 15 calendar days of completion. The following information must be included in the report:
  - (1) Time and date of the performance monitoring;
  - (2) Identification of the personnel involved;
  - (3) A summary of results, reported in units consistent with the applicable emission standard or limit;
  - (4) A summary of equipment operating conditions; and
  - (5) A description of the evaluation methods or procedures used including all field data, quality assurance/quality control procedures and documentation.
- b. Test results must be reported in units of pressure consistent with manufacturer's specifications.



## Appendix G

### Emission Testing Requirements

### Corn Silo Vent System Dust Collector

#### 1. Introduction:

The purpose of this testing is to quantify emissions from the Corn Silo Vent System Dust Collector and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

#### 2. Testing Requirements:

- a. **Testing Schedule.** Initial emission testing of each dust collector must be conducted no later than 90 calendar days after commencing regular operation. Subsequent emission testing of each dust collector must be performed on a continuing 10-year cycle, no later than the end of October of the year in which testing is due. Emission testing conducted more than three months prior to a scheduled due date will not satisfy the periodic source emission testing requirement unless prior written approval is obtained from SWCAA.
- b. **Test Plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Sampling must be conducted at the dust collector exhaust stack for each constituent listed below.
- d. **Test Runs/Reference Test Methods.** A minimum of three (3) test runs must be for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
Moisture content	EPA Method 4	60 minutes
PM	EPA Method 5, 17, or ODEQ 17	60 minutes
Opacity	SWCAA Method 9	6 minutes*

\* If visible emissions are observed during any 6 minute test run, the affected test run must be extended to a length of 60 minutes.

#### 3. Source Operation:

- a. **Source Operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of Production Parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. All recorded production parameters must be documented in the test results report. At a minimum, the following parameters must be recorded:
  - (1) Material transfer rate, and
  - (2) Process startups/shutdowns.

**Appendix G**  
**Emission Testing Requirements**  
**Corn Silo Vent System Dust Collector**

**4. Reporting Requirements:**

- a. **Test Report.** Unless otherwise directed by SWCAA, a final test report must be prepared and submitted (hard copy and electronic) to SWCAA within forty-five (45) calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
  - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
  - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
  - (4) Summary of control system or equipment operating conditions,
  - (5) Summary of production related parameters cited in Section 3 above,
  - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
  - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
  - (8) Copies of field data and example calculations,
  - (9) Chain of custody information,
  - (10) Calibration documentation,
  - (11) Discussion of any abnormalities associated with the results, and
  - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. Test results must be reported in units of gr/dscfm and lb/hr.

**5. Changes to Testing Requirements:**

Emission testing must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.