

- 3a. The HRSG and stand-by boiler are subject to a New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. Sulfur dioxide emissions from the HRSG and stand-by boiler shall not exceed the applicable limit, pursuant to the NSPS, 40 CFR 60.42c.
 - c. Opacity from the HRSG and stand-by boiler shall not exceed 20% opacity (6-minute average) during normal operation except for one 6-minute period per hour of not more than 27% opacity, pursuant to the NSPS, 40 CFR 60.43c.
 - d. At all times, the Permittee shall maintain and operate the HRSG and stand-by boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).
 - e. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7.
4. The Permittee shall not utilize distillate fuel oil (Grades No. 1 and 2) in the boiler with a sulfur content greater than the larger of the following two values pursuant to 35 Ill. Adm. Code 214:
 - a. 0.28 weight percent, or
 - b. The weight percent given by the formula: Maximum weight percent sulfur = $(0.000015) \times (\text{Gross heating value of oil, Btu/lb})$.
5. Operation in excess of the applicable emission standards during malfunction and breakdown of the cogeneration, HRSG and stand-by boiler is not allowed.
 6. The Permittee shall operate, maintain, and repair all air pollution control equipment in a manner that assures that the emission limits set in this permit are met at all times. The actions taken by the Permittee to meet this requirement shall include at least the following:
 - i. Visual inspections of air pollution control equipment shall be conducted on a regular schedule. Detailed inspections of control equipment shall be made at least once per year.
 - ii. Prompt repairs shall be made upon identification of need either as a consequence of formal inspections or other observations.
 - iii. Records of inspection, maintenance and repair activities shall be kept in accordance with Condition 7.

- iv. The control equipment must be in operation when process sources are in operation.
7. The Permittee shall keep monthly and annual records for all boilers and processes:
 - a. Amount of natural gas used in scf;
 - b. Amount of oil used in gallons;
 - c. Hours of operation of the cogeneration unit/HRSRG and stand-by boiler;
 - d. Amount of product produced in tons per month and tons per year, to demonstrate compliance with Table B and C; and
 - e. Amount of ink used and its VOM content, to demonstrate compliance with Table C.
 8. The hourly throughputs and annual gas usage and annual emissions of required air pollutants shall not exceed the limits listed in Tables A, B, and C, which shall be permitted emissions of this site.
 9. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
 10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
 11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Don Hanko at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

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cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Table A

1. Natural gas combustion emissions of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic material (VOM), sulfur dioxide (SO₂), and particulate matter (PM) from the co-generation unit, HRSG and standby boiler shall not exceed the following limits:

| Equipment | (mmBtu/Hr) | Usage | | Pollutant | Emission Factor (Lb/mmscf) | E M I S S I O N S | |
|-------------------------|-------------|------------|------------|-----------------|----------------------------|-------------------|----------|
| | | (mmscf/Mo) | (mmscf/Yr) | | | (Lb/Mo) | (Ton/Yr) |
| Co-Generation Unit/HRSG | 46.93/63.00 | 40 | 400 | NO _x | 413 | 16,520 | 82.6 |
| | | | | CO | 115 | 4,600 | 23.0 |
| | | | | TSP | 14 | 560 | 2.8 |
| | | | | VOM | 12.6 | 504 | 2.5 |
| | | | | SO ₂ | 0.0006 | 0.02 | --- |
| Stand-by Boiler | 40.95 | 10 | 100 | NO _x | 100 | 1,000 | 5.0 |
| | | | | CO | 84 | 840 | 4.2 |
| | | | | TSP | 7.6 | 76 | 0.38 |
| | | | | VOM | 5.5 | 55 | 0.28 |
| | | | | SO ₂ | 0.6 | 6 | 0.03 |

| Equipment | Usage (1000 Gal/Mo) | Usage (1000 Gal/Yr) | Pollutant | Emission Factor (Lb/1000 Gal) | E M I S S I O N S | |
|-----------------------------------------------|---------------------|---------------------|-----------------|-------------------------------|-------------------|--------|
| | | | | | (Lb/Mo) | (T/Yr) |
| CoGen Unit and Stand-by Boiler Using Fuel Oil | 1.5 | 19 | SO ₂ | 42.6 | 68.0 | 0.34 |
| | | | NO _x | 97.7 | 156.0 | 0.78 |
| | | | CO | 6.72 | 10.1 | 0.05 |
| | | | TSP | 8.54 | 14.0 | 0.07 |

These limits are based upon AP-42 emission factors and type and quantity of fuel as indicated in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

Table B

Central Systems and Crumb Chocolate Manufacturing

The hours of operation for these sources listed on this table are based on 8,760 hours per year. The process emission sources shall not exceed the following limits:

| <u>No.</u> | <u>Source Description</u> | <u>Throughput (Lb/Hour)</u> | <u>Control Percent Efficiency</u> | <u>Exhaust Rate (scfm)</u> | <u>Exhaust Loading (Gr/scf)</u> | <u>Particulate Matter Emissions</u> (Tons/Mo) (Tons/Yr) | |
|-----------------------------|-------------------------------|---------------------------------|-------------------------------------------|------------------------------------|-----------------------------------------|----------------------------------------------------------------|------|
| E-211 | Unloading to Sugar Receive | 20,000 | 99.95 | 900 | 0.02 | 0.07 | 0.7 |
| E-221 | Unloading to Sugar Receive | 20,000 | 99.95 | 900 | 0.02 | 0.07 | 0.7 |
| Bin #1 | Receivers to Sugar Bin | | | | | | 0.0 |
| Bin #2 | Receivers to Sugar Bin | 20,000 | 99.95 | 700 | 0.02 | 0.05 | 0.5 |
| Bin #3 | Receivers to Sugar Bin | 20,000 | 99.95 | 700 | 0.02 | 0.05 | 0.5 |
| Crumb Chocolate Manufacture | | | | | | | |
| H-203 | Receivers to Sugar Silo | 40,000 | 99.95 | 1,600 | 0.02 | 0.12 | 1.2 |
| H-352 | Sugar Mill to Receiver | 5,200 | 99.95 | 1,380 | 0.02 | 0.1 | 1.0 |
| H-205 | Bulk Milk Powder Bag Dump | 6,000 | 99.95 | 780 | 0.02 | 0.08 | 0.8 |
| H-202 | Milk Powder to Silo | 20,000 | 99.95 | 200 | 0.02 | 0.02 | 0.2 |
| 378-7 | Crumb Mill to Receiver | 5,000 | 99.95 | 1,446 | 0.02 | 0.11 | 1.1 |
| 377-7 | Crumb Mill to Receiver | 5,000 | 99.95 | 1,446 | 0.02 | 0.11 | 1.1 |
| H-356 | Mills to Silo | 10,000 | 99.95 | 3,150 | 0.02 | 0.24 | 2.4 |
| | | | | | | Total | 10.2 |

These limits are based upon AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

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Table C

Dry Powder to Slurry System and Printing

The hours of operation for the sources listed on this table are based on 8,760 hours per year.

| <u>No.</u> | <u>Source Description</u> | <u>Throughput (Lb/Hour)</u> | <u>Control Percent Efficiency</u> | <u>Exhaust Rate (scfm)</u> | <u>Exhaust Loading (Gr/scf)</u> | <u>Particulate Matter Emissions (Tons/Mo) (Tons/Yr)</u> | |
|------------------------------|-------------------------------|---------------------------------|-------------------------------------------|------------------------------------|-----------------------------------------|-----------------------------------------------------------------|------------|
| 1101 | Mix From Tote; Lines 1 & 2 | 15,840 | 99.95 | 432 | 0.02 | 0.03 | 0.3 |
| 1102 | Mix From Tote; Line 3 | 7,920 | 99.95 | 432 | 0.02 | 0.03 | 0.3 |
| Egg System | | | | | | | |
| 0501 | Hand Dump Soy to Hopper | 6,000 | 99.95 | 176 | 0.02 | 0.01 | 0.1 |
| 0502 | Hand Dump Egg Albumin | 6,000 | 99.95 | 176 | 0.02 | 0.01 | 0.1 |
| K-Type Chocolate Manufacture | | | | | | | |
| 644-1 | Milk Truck to Receiver | 20,000 | 99.95 | 630 | 0.02 | 0.05 | 0.5 |
| H-655 | Milk Powder to Silo | 20,000 | 99.95 | 200 | 0.02 | 0.02 | 0.2 |
| 647-6 | Crumb Mill to Receiver | 8,800 | | | | 0.16 | 1.6 |
| H-656 | Receive to Crumb Silo | 8,800 | 99.95 | 2,150 | 0.02 | 0.16 | <u>1.6</u> |
| | | | | | | Total | <u>4.7</u> |

Volatile Organic Emissions:

Videojet & Ink Jet Printers 1,000 (Gallons) 3.35 (Tons/Yr)

Total Emissions from Tables A, B, and C

| <u>Carbon Monoxide</u> | <u>Nitrogen Oxide</u> | <u>Particulate Matter</u> | <u>Volatile Organic Material</u> |
|------------------------|-----------------------|---------------------------|----------------------------------|
| 27.25 | 88.38 | 18.08 | 6.13 |

These limits are based upon AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

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