Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director
DEPARTMENT OF NATURAL RESOURCES
dnr.mo.gov

DEC 0 6 2016

Mr. James L. Bicklein
Anheuser-Busch, LLC
One Busch Place 137-1
St. Louis, MO 63118-1852

Re: Anheuser-Busch, LLC, 510-0003
Permit Number: OP2016-041

Dear Mr. Bicklein:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:bgj

Enclosures

c: PAMS File: 2015-04-056

Recycled paper

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES
Air Pollution Control Program

PART 70
PERMIT TO OPERATE

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

Operating Permit Number: OP2016-041
Expiration Date: DEC 0 6 2021
Installation ID: 510-0003
Project Number: 2015-04-056

Installation Name and Address
Anheuser-Busch, LLC
One Busch Place 137-4
St. Louis, MO 63118-1852
City of St. Louis

Parent Company's Name and Address
Anheuser-Busch InBev
One Busch Place 137-4
St. Louis MO, 63118-1852

Installation Description:

The Anheuser-Busch, LLC. St. Louis Brewery produces beer from barley malt, cereal grains (adjuncts), water, hops and yeast. The process begins with wort production, which converts the water, malt and adjunct into a yeast fermentable substrate. Hops are added for flavor and then the wort is fermented to produce beer. Ultimately, the beer is filtered, packaged and pasteurized. The brewery is divided into seven major areas: grains handling; brewing; fermenting; finishing; beer packaging and shipping; utilities; and wastewater pretreatment.

for Michael Stansfield
Prepared by
Berhanu A. Getahun
Operating Permit Unit

Kyra L. Moore
Director or Designee
Department of Natural Resources

DEC 0 6 2016
Effective Date

Table of Contents

I. Installation Equipment Listing

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit	Emission Unit Location	Manufacturer/Model
B01	Boiler 1	Building 6	Babcock & Wilcox
B07	Boiler 7	Building 179	Babcock & Wilcox
B08	Boiler 8	Building 6	Zern
B09	Boiler 9	Building 6	Zern
CP404	Standby Power Generator	South of Building 181	Caterpillar Model 3615B
GN254	Solvent Clean-up Hood	Building 137 (Bevo)	~
	GT300 - Grain Transfer System (6)		
GT300-1	Malt Filter/Receiver, Grain Transfer 1	Building 59, 5th Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-2	Rice/Corn/Special Malt Filter/Receiver, Grain Transfer 2	Building 59, 5th Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-3	Rice/Corn/Malt Filter/Receiver, Grain Transfer 3	Building 259, 3rd Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-4	Malt Milling Filter/Receiver, Grain Transfer 5	Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/6 B-25
GT300-5	Rice/Corn/Special Malt Milling Filter/Receiver, Grain Transfer 6	Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag 36/6 B-25
GT300-6	Rice/Corn/Malt Filter/Receiver, Grain Transfer 7	Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag 36/6 B-25
GT300-7	Malt Dust Transfer Filter/Receiver	Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag RPHV-4/3
	GT300 - Grain Cleaners (5)		
GT300-8	Rice Cleaner 1	Building 59, 2nd Floor	~
GT300-9	Malt Cleaner 2	Building 59, 3rd Floor	~
GT300-10	Malt Cleaner 3	Building 59, 3rd Floor	~
GT300-11	Rice/Corn/Malt Cleaner 4	Building 259, 2nd Floor	~
GT300-12	Rice/Corn/Malt Cleaner 5	Building 259, 2nd Floor	~
	GT300 - Emergency Truck Loadout & Hopper/Feeders		
GT300-13	Hopper/Feeder - Malt Line from Cleaners 2 & 3	Buildings 48 and 59	~
GT300-14	Hopper/Feeder - Rice/Grits from Cleaners 4 & 5	Building 259, 2nd Floor	~
GT300-15	Hopper/Feeder from Cleaner 1	Buildings 48 and 59	~
GT34	Emergency Truck Loadout	Building 48	~

Emission Unit #	Description of Emission Unit	Emission Unit Location	Manufacturer/Model
	GT300 - Grain Milling and Weighing System		
GT300-16	Malt Surge Bins (2), Grain Transfer 5	Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-17	Malt Distribution Bin, Grain Transfer 5	Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-18	Malt Mills (6)	Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-19	Scale Hoppers (2)	Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-20	Malt Surge Bins (2), Grain Transfer 7	Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-21	Rice Surge Bin, Grain Transfer 6	Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-22	Corn Surge Bin, Grain Transfer 6	Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-23	Rice Mills (4), Grain Transfer 6	Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-24	Scale Hoppers (2), Grain Transfer 6	Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
	GU300 - Grain Unloading Systems (3)		
GU300-1	Grain Unloading 1	Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/5B-225
GU300-2	Grain Unloading 2	Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-3	Grain Unloading 3	Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-4	Pressure Vessels, Grain Unloading 1	Building 221, Floors 1 and 2M	~
GU300-5	Pressure Vessels-Malt, Grain Unloading 2	Building 221, Floors 1 and 2M	~
GU300-6	Filter/Receiver 2B, Grain Unloading 2	Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/8 B-25
GU300-7	Filter/Receiver 3B, Grain Unloading 3	Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-8	Filter/Receiver 1B, Grain Unloading 1	Building 48, Roof	Fabric Filter - Low

Emission Unit #	Description of Emission Unit	Emission Unit Location	Manufacturer/Model
GU300-9	Filter/Receiver 2C, Grain Unloading 2	Building 48, Roof	Temperature- Buhler Miag ASFA 36/8 B-25 Fabric Filter - Low Temperature- Buhler Miag ASFA 36/8 B-25
GU300-10	Elevator C & D Conveyor, Grain Unloading 3	Buildings 48 and 59	~
GU300-11	Elevator H Drag Conveyor, Grain Unloading 2	Building 39A, Roof	~
GU300-12	Elevator C Drag Conveyor, Grain Unloading 1	Buildings 48 and 59	~
PK240	Draft Lines (93 Fillers)	Building 204 (Warehouse Addition)	~
PK241	Lines 60, 66, 67, 68 & 69 Fillers – Cans	Building 137 (Bevo)	~
PK242	Lines 34, 36, 37, 38, 39 & 40 Fillers - Bottles (NR)	Buildings 137 (Bevo), Building 204	~
PK244	Videojet Ink Coders	Buildings 137 (Bevo) and 204	Video Jet Corp.
PK253	Diagraph Coders	Buildings 137 (Bevo) and 204	~
PK442	Beer Packaging - Sanitizing Solution - Line 39	Buildings 137 (Bevo) and 204	~
SH171	D.E. Silo 1	Building 190	~
SH172	D.E. Silo 2	Building 190	~
SH314	D.E. Scale Tank	Building 190	~
SH425	Schoene Receivers-Stockhouse 19	Building 229 (Stockhouse 19), 2nd Floor	~
SH426	Schoene Tanks-Stockhouse 19	Building 229 (Stockhouse 19)	~
SH427	Schoene Beer Balance Tanks-Stockhouse 19	Building 229 (Stockhouse 19), 2nd Floor	~
SH429	K-Filters-Stockhouse 19	Building 229 (Stockhouse 19), 1st Floor	~
SH430	Filter Beer Balance Tanks-Stockhouse 19	Building 229 (Stockhouse 19), 1st Floor	~
SH431	Finishing Tanks-Stockhouse 19	Building 229 (Stockhouse 19), 2nd Floor	~
SH432	Blowback Tanks-Stockhouse 19	Building 229 (Stockhouse 19), 2nd Floor	~
SH433	Spent D.E. Slurry Tank, Stockhouse 19	Building 229 (Stockhouse 19), 5th Floor	
SH191	Chip Tanks, Stockhouse 14	Building 155	
SH195	Chip Washers/Separators, Stockhouse 14	Building 155, 6th Floor	
SH192	Chip Tanks, Stockhouse 16	Building 166	
SH196	Chip Washers/Separators, Stockhouse 16	Building 166, 6th Floor	
SH269	Spent Yeast Tank, Stockhouse 16	Building 166A, 1st Floor	
SH410	Unitanks, Stockhouse 16	Building 166A, 1st Floor	
SH198	Vertical Alpha Tanks, Stockhouse 17	Building 189, 1st Floor	
SH199	Vertical Alpha Tank Drop Receiver #1, Stockhouse 17	Building 189, 1st Floor	
SH200	Vertical Alpha Tank Drop Receiver #2, Stockhouse 17	Building 189, 1st Floor	
SH292	Cold Wort Settlers, Stockhouse 17	Building 226, 1st Floor	
SH293	Yeast Brinks, Stockhouse 17	Building 189, 1st Floor	
SH294	Spent Yeast Brink, Stockhouse 17	Building 189, 1st Floor	
SH193	Chip Tanks, Stockhouse 18	Building 215	
SH197	Chip Washers/Separators, Stockhouse 18	Building 215, 2nd Floor	
SH515	Unitanks, Stockhouse 20	Building 242, 1st Floor	

Emission Unit #	Description of Emission Unit	Emission Unit Location	Manufacturer/Model
SH516	Krauesen Tanks, Stockhouse 20	Building 242, 1st Floor	
SH177	Spent Beechwood Chip Dumpster	Various	
SH717	Specialty Unitanks		
SH729	Yeast Propagator		
SH907	Bulk Beer Loadout		
UT381	Biogas Flare	BERS	John Zink EEF-U-12LF Energy Efficient Flare Tip
UT382	Biogas Filter	BERS	Custom Design
UT410	CO_2 Regeneration System 3-Stockhouse 17, 3rd Floor	Building 189 (Stockhouse 17), 3rd Floor	~
UT447	250 Gallon Gasoline Storage Tank		

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Reference Number	Emission Source Description
BH200	Brew Holding Kettles
BH201	Brew Kettles
BH202	Hot Wort Receivers
BH203	Wort Aerators
BH204	Mash Cookers 1 through 12
BH205	Lauter Tuns
BH82 & BH85	Spent Grain Buffer Tanks
BH74	Mash Cooker 13
BH75	Mash Cooker 14
BH76	Mash Cooker 15
BH77	Mash Cooker 16
BH78	Mash Cooker 17
BH79	Mash Cooker 18
BH131	Hops Strainers 1, 2 and 3
CP401	Corporate Yeast Culture
CP405	2000 Gal No. 2 Fuel Oil Tank
F406	Fumigation-Railcar
F407	Fumigation-General
GN251	Parts Washers
GN306	Card Board Baler , Building 137 (Bevo)
GN308	Explosion Protection
GN311	Welding Various (Fugitive)
GN355	General Paint/Solvent – Water Based Paint
GT300	Grain Transfer System (Fugitive)
GU248	Five (5) Vacuum Cleaner System (Grain Area)
GN354	Miscellaneous Clean-up Solvent
GN355	Structural Coatings – General Paint/Solvent Usage
INS500	Portable Space Heaters
INS501	Fixed Heating Units
PB186	Malt Transfer from Elevator H to Pilot Brewery, Pilot Brewery
PB223	Portable Grain Bins - Pilot Brewery
PB224	Malt Mill - Pilot Brewery

Reference Number	Emission Source Description
PB225	Portable Tote Bins - Pilot Brewery
PB228	Malt Dryer - Pilot Brewery
PB229	Mash Cookers - Pilot Brewery
PB231	Lauter Tun - Pilot Brewery
PB232	Spent Grains Buffer Tank - Pilot Brewery
PB234	Hot Wort Receiver-Pilot Brewery
PB236	Wort Aerator/Stripper-Pilot Brewery
PB237	Alpha Tanks-Pilot Brewery
PB238	Chip Tanks-Pilot Brewery
PB318	Schoene Tanks-Pilot Brewery
PB319	K-Filter-Pilot Brewery
PB323	Filter Beer Tanks-Pilot Brewery
PB324	Beer Packaging-Pilot Brewery
PB325	Cold Wort Settlers-Pilot Brewery
PB326	Chip Washer-Pilot Brewery
PB327	Schoene Beer Balance Tank
PB328	Pasteurizer-Pilot Brewery
PB329	Hops Strainer-Pilot Brewery
PK246	Bottle and Can Crusher
PK247	Pasteurizers
PK248	Beer Packaging-Hot Melt Glue
PK249	Beer Packaging-Casein Glue
PK250	Beer Packaging-Non-Casein Glue
PK251	Keg Washer (2)
PK256	Packaging Line Lubricants
PK260	Waste Beer Sump
PK439	Line 39 Hot Melt Glue
PK440	Line 39 Label Glue
RH136	Spent Grains Tank
RH165	Wet Spent Grain Presses
RH166	Spent Grains Centrifuges
RH220	Wet Spent Grains Tanks 1
RH221	Wet Spent Grains Tanks 2
RH222	Wet Spent Grains Loadout Tank
RH436	Wet Spent Grains Emergency Loadout
SH177	Spent Beechwood Chip Dumpsters
SH191	Chip Tanks, Stockhouse 14
SH192	Chip Tanks, Stockhouse 16
SH193	Chip Tanks, Stockhouse 18
SH195	Chip Washers, Stockhouse 14
SH196	Chip Washers, Stockhouse 16
SH197	Chip Washers, Stockhouse 18
SH198	Vertical Alpha Tanks, Stockhouse 17
SH199	Vertical Alpha Tanks Drop Receiver 1, Stockhouse 17
SH200	Vertical Alpha Tanks Drop Receiver 2, Stockhouse 17
SH269	Spent Yeast Brink, Stockhouse 16
SH292	Cold Wort Settlers, Stockhouse 17
SH293	Yeast Brinks, Stockhouse 17
SH294	Spent Yeast Brink, Stockhouse 17
SH320	Kraeusen Holding Tanks, Stockhouse 16
SH410	Unitanks, Stockhouse 16
SH428	ACP System –Stockhouse 19

Reference Number	Emission Source Description
SH434	Tannin/D.E. Manual Drop Station, Stockhouse 19
UT305	Bulk Salt System (Water Softener)
UT408	CO_2 Regeneration System 1-Stockhouse 17, 2nd Floor
UT411	Ammonia-Based Refrigeration System
UT412	Ammonia Recovery System
UT445	Ammonia Refrigeration System (fugitive)
UT446	Cooling Towers

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

PERMIT CONDITION PW001

10 CSR 10-6.065 Operating Permits
10 CSR 10-6.065(6)(C)2.A. Voluntary Limitation(s)

Emission Limitation:
The permittee shall discharge into the atmosphere from the entire installation less than 2,000 tons of Sulfur Dioxide (SO_2) in any consecutive 12-month period.

Monitoring/RecordKeeping:
1) The permittee shall maintain an accurate record of emissions of SO_2 emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the SO_2 emissions from this installation. Example form is attached as Attachment A (Plant-wide SO_2 Emissions Tracking Record). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the SO_2 emission limitation (less than 2,000 tons per consecutive 12-month period of SO_2).
2) Recordkeeping shall be accomplished in accordance with the requirements of 10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements, as stated in Section V of this permit.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit condition shows an exceedance of the limitation imposed by this permit condition. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

B01, B07, B08 and B09 – Boilers (Located in Building 6)		
Emission Unit	Description	Manufacturer
B01	Boiler 1 – Wall Fired, 230 Million British Thermal Units (MMBtu/hr) (constructed 1984); Fuel: Natural Gas	Babcock & Wilcox
B07	Boiler 7 – Cyclone, 232.6 MMBtu/hr (constructed 1966); Fuel: Natural Gas	
B08	Boiler 8 – 99 MMBtu/hr (constructed 1988); Fuel: Natural Gas and Biogas	Zern
B09	Boiler 9 – 99 MMBtu/hr (constructed 1988); Fuel: Natural Gas and Biogas	

Permit Condition (B01 and B07) - 001

10 CSR 10-5.510
Control of Emissions of Nitrogen Oxides

Emission Limitation:
The permittee shall not allow Boiler 1 (B01) and Boiler 7 (B07) to emit Nitrogen Oxides (NOx) in excess of the emission rates specified below as measured pursuant to Section (5) of 10 CSR 10-5.510.

Maximum Allowable Emission Rates
(Pounds of NO_x per MMBtu)

Unit Firing Configuration	Fuel Type		
	Gaseous Fuel	Coal – Dry Bottom	Distillate Oil
B01 – Boiler 1, Wall Fired	0.2	NA	NA
B07 – Boiler 7, Cyclone	0.5	NA	NA

NA = Boiler not permitted to combust this fuel type.

Compliance Testing:
The permittee shall perform stack testing every three (3) years to determine compliance with the allowable emission rates as specified in 10 CSR 10-5.510(5)(A).

Monitoring:
1) The permittee shall monitor the total fuel consumed on a monthly basis.
2) The permittee shall monitor the total heat input for each emissions unit on a monthly basis.

Recordkeeping:

The permittee shall maintain records of the following:

1) Total fuel consumed on a monthly basis;
2) The total heat input of each emission unit on a monthly basis; and
3) Reports of all stack testing conducted to meet the requirements of this rule.

Reporting:

1) The permittee shall submit for each NO_x emissions unit which uses stack tests to demonstrate compliance, an annual report identifying monthly fuel usage and monthly total heat input,
2) The permittee shall submit two copies of a written report of the performance test results to the Director of the Air Pollution Control Program within 60 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one sample run. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.
3) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliances and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

Permit Condition (B08 and B09) - 001

10 CSR 10-5.510
Control of Emissions of Nitrogen Oxides

Operational Limitation/Equipment Specifications:

The permittee shall complete an annual adjustment or tune up on the combustion process for boiler 8 and boiler 9. This adjustment or tune up shall include at a minimum the following items:

1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of nitrogen oxides (NO_x) and, to the extent practicable, minimize emissions of carbon monoxide (CO); and
3) Inspection of the air to fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

Monitoring/Recordkeeping:

The permittee shall maintain records of the annual adjustments or tune ups and associated actions resulting from the adjustments/tune-ups and any action resulting from these adjustments/tune-ups.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certifications to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

Permit Condition (B08 and B09) - 002

10 CSR 10-6.060
Construction Permits Required - City of St. Louis APCD Permit No. 07-07-010

Emission Limitation:

1) The permittee shall not allow emissions from Boiler 8, Boiler 9 and Biogas Flare (UT381) to exceed the values in the maximum permitted emission rate listed in the table below:
[Permit No. 07-07-010]

Pollutant	Maximum Permitted Emission Rate Tons Per Year
Sulfur Oxides (SO_x)	1,276
Nitrogen Oxides (NO_x)	308
Particulate Matter Less Than Ten Microns (PM_{10})	17
Carbon Monoxide (CO)	279
Volatile Organic Compounds (VOC)	40

2) The heat input of each boiler shall not exceed 99 MMBtu per hour.
[Permit No. 07-07-010, Section II: Limitation A.]
3) Boiler 8 and Boiler 9 shall be limited to the following fuels: natural gas and biogas. These fuels may be combusted singly or in any combination provided that the combined emissions from Boiler 8, Boiler 9 and the biogas flare do not exceed the maximum permitted rate, in tons per year, from the above table in any calendar year. [Permit No. 07-07-010, Section II: Limitation B.]

Monitoring:

1) The permittee shall operate and maintain Boiler 8 and Boiler 9 using the principles of Good Engineering Practice considering the corporate experience with the type of equipment.
[Permit No. 07-07-010, Section III: Condition A.]
2) The permittee shall measure and record the hydrogen sulfide content of biogas daily.
[Permit No. 07-07-010, Section III: Condition C.]

Recordkeeping:

The permittee shall comply with the following recordkeeping requirements:

1) Daily records shall be kept describing the quantity of biogas produced and whether it is combusted in the boilers or in the BERS flare. [Permit No. 07-07-010, Section IV: Recordkeeping A.]
2) Monthly records shall be kept of all fuels, other than biogas, combusted in the boilers.
[Permit No. 07-07-010, Section IV: Recordkeeping B.]
3) Records of the daily hydrogen sulfide determination shall be kept.
[Permit No. 07-07-010, Section IV: Recordkeeping C.]
4) Monthly records of the estimated emissions from the boilers and the BERS flare shall be kept. These records shall include the annual totals. [Permit No. 07-07-010, Section IV: Recordkeeping E.]
5) The permittee shall keep records of maintenance performed on Boiler 8 and Boiler 9.
[Permit No. 07-07-010, Section IV: Recordkeeping F.]
6) All records shall be kept for a minimum of 60 months.
[Permit No. 07-07-010, Section IV: Recordkeeping G.]

Reporting:
The permittee shall report any exceedance of any terms and conditions of Permit 07-07-010 to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, in writing no later than twenty (20) days after discovering the exceedance. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

CP404 – Emergency Generator		
Emission Unit	Description	Manufacturer/ Model #
CP404	Standby Power Generator, South of Building 181 • Fuel: No. 2 Diesel • Installation Date: 1996 • Capacity: 2876 HP / 21 MMBtu/hr	Caterpillar/ Model 3516B

Permit Condition (CP404) - 001

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds[1]

Emission Limitation:
The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of SO_2 or more than 35 mg/m^3 of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period. [10 CSR 10-6.260(3)(A)2.]

Monitoring/Recordkeeping:
The permittee shall keep documentation supporting the fuel used is No. 2 diesel fuel.

Reporting:
The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

Permit Condition (CP404) - 002

10 CSR 10-6.261 Control of Sulfur Dioxide Emissions[2]

Emission Limitation:
The permittee must limit the fuel sulfur content of the fuel oil to no more than 8,812 parts per million (ppm). [10 CSR 10-6.261(3)(C)]

[1] 10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and are federally enforceable. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action. Permit Condition (CP404) - 001 will expire and the limitations thereof will no longer apply to the installation once 10 CSR 10-6.261 is incorporated into the SIP.

[2] Ibid.

Compliance Demonstration:

The permittee must determine compliance with the fuel sulfur content limitation of this permit condition as follows:

1) Fuel delivery records.

Recordkeeping:

1) The permittee must maintain fuel delivery/purchase receipts.
2) The permittee must also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel or #2 fuel oil);
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
   d) The heating value of the fuel.
3) The permittee must retain all reports and records on-site for a minimum of five (5) years and made available within five (5) business days upon written or electronic request by the director.

Reporting:

1) The permittee must furnish the director all data necessary to determine compliance status.
2) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

Permit Condition (CP404) - 003

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Limitation:

The permittee must comply with the requirements in Table 2d to Subpart ZZZZ of Part 63 which apply to the facility (listed below). [§63.6603(a)]

For each …..	The permittee must meet the following requirement, except during periods of startup	During periods of startup you must
Emergency CI [2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[1] The permittee has the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ.

Pursuant to §63.6625(i), the oil analysis must be performed at the same frequency specified for changing the oil in Table 2d (see table above) to Subpart ZZZZ of Part 63. 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 before continuing to use the engine. The permittee 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.

[2] If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Monitoring, Operation and Maintenance Requirements:

1) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop the permittee's 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. [§63.6625(e)]
2) The permittee must install a non-resettable hour meter if one is not already installed. [§63.6625(f)]
3) The permittee must 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 Table 2d to Subpart ZZZZ of Part 63 apply. [§63.6625(h)]
4) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 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 permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil before continuing to use the engine. The permittee 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. [§63.6625(g)]

Compliance Requirements:

1) The permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ of 40 CFR Part 63 that apply to the permittee at all times. [§63.6605(a)]
2) The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2d to Subpart ZZZZ of 40 CFR Part 63 that apply to you according to methods specified below (from Table 6 to Subpart ZZZZ of 40 CFR Part 63). [§63.6640(a)]

For Each…	Complying with the requirements to …	The permittee must demonstrate continuous compliance by …
Existing stationary CI RICE not subject to any numerical emission limitations	Work or Management practices	i Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii Develop and follow the permittee's 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.

3) The permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of §63.6640. 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 §63.6640, is prohibited. If you do not operate

the engine according to the requirements in paragraphs (f)(1) through (4) of §63.6640, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§63.6640(f)]

a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)]
b) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraph (f)(2)(i) §63.6640 for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of §63.6640 counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). [§63.6640(f)(2)]
    i) The 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. §63.6640(f)(2)(i)]
c) The emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. Except as provided in paragraph (f)(4)(ii) of §63.6640, 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.
    i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§63.6640(f)(4)(ii)]
        (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [§63.6640(f)(4)(ii)(A)]
        (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§63.6640(f)(4)(ii)(B)]
        (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§63.6640(f)(4)(ii)(C)]
        (D) The power is provided only to the facility itself or to support the local transmission and distribution system. [§63.6640(f)(4)(ii)(D)]
        (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [§63.6640(f)(4)(ii)(E)]

Recordkeeping:

1) The permittee must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of §63.6655. [§63.6655(a)]
    a) A copy of each notification and report that you submitted to comply with Subpart ZZZZ of 40 CFR Part 63, including all documentation supporting any Initial Notification or Notification of

Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]

b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]

c) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b). [§63.6655(a)(5)]

2) The permittee must keep the records required in Table 6 of Subpart ZZZZ of 40 CFR Part 63 to show continuous compliance with each emission or operating limitation that applies to you. [§63.6655(d)]
3) The permittee's records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
4) As specified in §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. [§63.6660(b)]
5) 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). [§63.6660(c)]

Reporting:

1) The permittee must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to Subpart ZZZZ of 40 CFR Part 63 that applies. These instances are deviations from the emission and operating limitations in Subpart ZZZZ of 40 CFR Part 63. These deviations must be reported according to the requirements in §63.6650. [§63.6640(b)]
2) The permittee must also report each instance in which the permittee did not meet the requirements in Table 8 to Subpart ZZZZ of 40 CFR Part 63 — Applicability of General Provisions to Subpart ZZZZ that apply. [§63.6640(e)]
3) *Reporting requirements* [§63.6650]
   a) The permittee must submit each report in Table 7 of Subpart ZZZZ of 40 CFR Part 63 that applies. [§63.6650(a)]
   b) Pursuant to 40 CFR §63.6650(b)(5), the permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit instead of according to the dates specified in in paragraphs (b)(1) through (b)(4) of §63.6650.
   c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of §63.6650. [§63.6650(c)]
      i) Company name and address. [§63.6650(c)(1)]
      ii) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)2)]
      iii) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
      iv) If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]

v) If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]

d) For each deviation from an emission or operating limitation that occurs for the stationary RICE where the permittee is not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ of 40 CFR Part 63, the Compliance report must contain the information in paragraphs (c)(1) through (4) of §63.6650 and the information in paragraphs (d)(1) and (2) of §63.6650. [§63.6650(d)]
   i) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
   ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(c)(2)]

e) The permittee must report all deviations as defined in Subpart ZZZZ of 40 CFR Part 63 in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the permittee submits a Compliance report pursuant to Table 7 of Subpart ZZZZ of 40 CFR Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ of 40 CFR Part 63, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]

Permit Condition (CP404) - 004

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit No. 96-07-058A (Standby Power Generator) Amendment to Permit No. 96-07-058 (dated Oct. 10, 2002)

Operational Limitation:

1) The permittee shall not allow the operation of the generator, for maintenance and emergency use, to exceed 200 hours in any consecutive twelve-month period.
2) The permittee shall use only No. 2 Diesel Fuel in this generator.

Monitoring/Recordkeeping:

The permittee shall maintain an accurate record of hours of operation on a monthly and consecutive 12-month basis; and documentation supporting the fuel used is No. 2 diesel fuel.

Reporting:

The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after the permittee determined that the emission unit(s) exceeded the operational limitation(s). Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

GN254 – Solvent Clean-up Hood	
Emission Unit	Description
GN254	Solvent Clean-up Hood; Building 137 (Bevo)

Permit Condition (GN254) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit No. 03-04-005

Operational Limitation:

The permittee shall not allow or permit the solvent throughput to exceed 500 gallons in any consecutive twelve-month period.

Monitoring/Recordkeeping:

The permittee shall maintain monthly solvent usage records that demonstrate, each month, that the twelve (12) month rolling total operational limitation of 500 gallons is being met. Monthly records shall show the twelve (12) month rolling total.

Reporting:

The permittee shall provide a written report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than twenty (20) days after the permittee determined that the emission unit exceeded the operational limitation. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

GT300 (GT300-1 through GT300-7) -Grain Transfer Systems (6) The fabric filter receivers are inherent parts of the processes		
Emission Unit	Description	Manufacturer/ Model #
GT300-1	Malt Filter/Receiver, Grain Transfer 1; Building 59, 5th Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-2	Rice/Corn/Special Malt Filter/Receiver, Grain Transfer 2; Building 59, 5th Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-3	Rice/Corn/Malt Filter/Receiver, Grain Transfer 3; Building 259, 3rd Floor	Fabric Filter - Low Temperature- Buhler Miag ASFA 44/6 B-225
GT300-4	Malt Milling Filter/Receiver, Grain Transfer 5; Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/6 B-25
GT300-5	Rice/Corn/Special Malt Milling Filter/Receiver, Grain Transfer 6; Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag 36/6 B-25
GT300-6	Rice/Corn/Malt Filter/Receiver, Grain Transfer 7; Building 237, Roof	Fabric Filter - Low Temperature- Buhler Miag 36/6 B-25
GT300-7	Malt Dust Transfer Filter/Receiver; Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag RPHV-4/3

GT300 (GT300-8 through GT300-12) - Grain Cleaners (5)	
Emission Unit	Description
GT300-8	Rice Cleaner 1 with Baghouse; Building 59, 2nd Floor
GT300-9	Malt Cleaner 2 with Baghouse; Building 59, 3rd Floor
GT300-10	Malt Cleaner 3 with Baghouse; Building 259, 3rd Floor
GT300-11	Rice/Corn/Malt Cleaner 4 with Baghouse; Building 259, 2nd Floor
GT300-12	Rice/Corn/Malt Cleaner 5 with Baghouse; Building 259, 2nd Floor

GT300 (GT300-13 through GT300-15) - Hopper/Feeders GT34 –Emergency Truck Loadout	
Emission Unit	Description
GT300-13	Hopper/Feeder - Malt Line from Cleaners 2 & 3 with Baghouse; Buildings 48 and 59
GT300-14	Hopper/Feeder - Rice/Grits from Cleaners 4 & 5 with Baghouse; Building 259, 2nd Floor
GT300-15	Hopper/Feeder from Cleaner 1 with Baghouse, Building 48 & 59
GT34	Emergency Truck Loadout; Building 48

GT300 (GT300-16 through GT300-24) - Grain Milling and Weighing System The fabric filter receivers are inherent parts of the processes		
Emission Unit	Description	Manufacturer/ Model #
GT300-16	Malt Surge Bins (2), Grain Transfer 5 Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-17	Malt Distribution Bin, Grain Transfer 5 Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-18	Malt Mills (6) Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-19	Scale Hoppers (2) Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-20	Malt Surge Bins (2), Grain Transfer 7 Building 237, Floors 3, 5, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-21	Rice Surge Bin, Grain Transfer 6 Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-22	Corn Surge Bin, Grain Transfer 6 Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-23	Rice Mills (4), Grain Transfer 6 Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A
GT300-24	Scale Hoppers (2), Grain Transfer 6 Building 237, Floors 2, 4, 7 and 8	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8A

Permit Condition (GT300) - 001
Permit Condition (GT34) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Grain Handling Permit, Permit No. 04-11-020, Dated January 26, 2004

Emission Limitation:
The permittee shall limit the total throughput of all grain (malt, rice, corn, and other adjuncts) transferred, cleaned, and weighed in the grain cleaning, milling, and weighting system to 1,478,250 tons facility-wide in any consecutive twelve (12) month period.

Operational Limitation/Equipment Specifications:
The permittee shall only operate the grain cleaning, milling and weighing system while the fabric filters controlling particulate emissions are in operation.

Monitoring/Recordkeeping:
The permittee shall record the monthly throughput of grain (malt, rice, corn, and other adjuncts) that is processed in the grain cleaning, milling, and weighing system and totaled on a consecutive twelve (12) month basis as determined by the scale hoppers.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after any exceedance of any of the terms imposed by this permit condition. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition (GT300) - 002
Permit Condition (GT34) - 002

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:
1) The permittee shall not cause, suffer, allow or permit the emissions of particulate matter (PM) in any one (1) hour from the emission units listed in the table below in excess of the rates specified in the following table:

Emission Unit	PM Limit (lb/hr)
GT300-1	47.42
GT300-2	41.00
GT300-3	47.42
GT300-4	47.42
GT300-5	41.00
GT300-6	47.42
GT300-7	47.42
GT300-8	41.00
GT300-9	41.00
GT300-10	41.00

Emission Unit	PM Limit (lb/hr)
GT300-11	41.00
GT300-12	41.00
GT300-13	47.42
GT300-14	47.42
GT300-15	41.00
GT34	47.42
GT300-15	47.42
GT300-16	47.42
GT300-17	47.42
GT300-18	47.42

Emission Unit	PM Limit (lb/hr)
GT300-19	47.42
GT300-20	41.00
GT300-21	41.00

Emission Unit	PM Limit (lb/hr)
GT300-22	41.00
GT300-23	41.00

2) The permittee shall not cause, allow or permit the emission of particulate matter from GT300-1 through GT300-23 and GT 34 in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases

Monitoring/Recordkeeping/Reporting:
Not required (See Statement of Basis).

GU300 (GU300-1 through GU300-12) -Grain Unloading Systems (3)
The fabric filter receivers are inherent parts of the processes

Emission Unit	Description	Manufacturer/ Model #
GU300-1	Grain Unloading 1; Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/5B-225
GU300-2	Grain Unloading 2; Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-3	Grain Unloading 3; Building 221, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-4	Pressure Vessels, Grain Unloading 1; Building 221, Floors 1 and 2M	~
GU300-5	Pressure Vessels-Malt, Grain Unloading 2; Building 221, Floors 1 and 2M	~
GU300-6	Filter/Receiver 2B, Grain Unloading 2; Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/8 B-25
GU300-7	Filter/Receiver 3B, Grain Unloading 3 Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 64/8 B-225
GU300-8	Filter/Receiver 1B, Grain Unloading 1; Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/8 B-25
GU300-9	Filter/Receiver 2C, Grain Unloading 2; Building 48, Roof	Fabric Filter - Low Temperature- Buhler Miag ASFA 36/8 B-25
GU300-10	Elevator C & D Conveyor, Grain Unloading 3; Buildings 48 and 59	~
GU300-11	Elevator H Drag Conveyor, Grain Unloading 2 Building 39A, Roof	~
GU300-12	Elevator C Drag Conveyor, Grain Unloading 1; Buildings 48 and 59	~

Permit Condition (GU300) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Grain Handling Permit, Permit No. 04-11-020, Dated January 26, 2004

Emission Limitation:

The permittee shall limit the total throughput of all grain (malt, rice, corn, and other adjuncts) unloaded through the grain unloading system to 1,379,700 tons facility-wide in any consecutive twelve (12) month period.

Operational Limitation/Equipment Specifications:

The permittee shall only operate the grain unloading system while the fabric filters controlling particulate emissions are in operation.

Monitoring/Recordkeeping:

The permittee shall record the monthly throughput of grain (malt, rice, corn, and other adjuncts) unloaded to the Grain Handling System and totaled on a consecutive twelve (12) month basis using grain receipts.

Reporting:

The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after any exceedance of any of the terms imposed by this permit condition. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition (GU300) - 002

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

1) The permittee shall not cause, suffer, allow or permit the emissions of particulate matter (PM) from GU300-01 through GU300-12 in excess of 45.03 lb/hr.

   Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

2) The permittee shall not cause, allow or permit the emission of particulate matter from GU300-1 through GU300-12 in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

PK240 through PK242, SH425 through SH433 and UT410 - Beer Production Units	
Emission Unit	Description
PK240	Beer Packaging - Draft Line (Line 93 Fillers – Kegs)
PK241	Beer Packaging – Cans Lines (Lines 60, 66, 67, 68 & 69 Fillers)
PK242	Beer Packaging – Bottles (NR) Lines (Lines 34, 36, 37, 38, 39, 40 and 90 Fillers)
SH425	Schoene Receivers-Stockhouse 19
SH426	Schoene Tanks-Stockhouse 19
SH427	Schoene Beer Balance Tanks-Stockhouse 19
SH429	K-Filters-Stockhouse 19
SH430	Filter Beer Balance Tanks-Stockhouse 19
SH431	Finishing Tanks-Stockhouse 19
SH432	Blowback Tanks-Stockhouse 19
SH433	Spent D.E. Slurry Tank, Stockhouse 19
SH717	Specialty Unitanks – Four (4) 1,000 Barrel each Unitank fermenters
SH729	Yeast Propagator
SH907	Bulk Beer Loadout
UT410	Carbon Dioxide (CO_2) Regeneration System 3-Stockhouse 17, 3rd Floor

Permit Condition (PK240 through PK242) - 001, Permit Condition (SH425 through SH433) - 001, Permit Condition (SH717, SH729 and SH907) - 001 and Permit Condition (UT410) – 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit, Permit No. 09-12-025, Issued March 24, 2010
Construction Permit No. 062016-009, Issued January 14, 2016

Emission Limitation:

The permittee shall comply with the following production limitations:

1) Total filling production (cans, bottles, draft and tanker trucks) shall be limited to 17.25 million barrels (MMbbls) of beer packaged in any consecutive twelve month period. [Construction Permit 062016-009, Special Condition 2]
2) Can and Bottle filling production shall be limited to 15.75 MMbbls of beer in any consecutive 12-month period. If draft production exceeds 1.5 MMbbls can and bottle filling production shall be further limited by the following equation: [Construction Permit 09-12-025, Section II.B.2]

   Can/Bottle Filling Production Limit= (17 .25 MMbbls - Draft Filling Production)

3) The Beer Finishing Equipment in Stockhouse 19 shall be limited to two million barrels of beer packaged per month and 17.25 million barrels of beer packaged in any consecutive twelve-month period. [Construction Permit 09-12-025, Section II.C]
4) The Carbon Dioxide Regeneration System Unit #3 shall be limited to 17.25 million barrels of beer packaged in any consecutive twelve-month period. [Construction Permit 09-12-025, Section II.D]

Monitoring/Recordkeeping:

1) The permittee shall record the monthly throughput of beer packaged from the Filling Operations and totaled on a consecutive twelve (12)-month basis. [Construction Permit 09-12-025, Section IV.B]
2) The permittee shall record the monthly throughput of barrels of beer packaged from the Beer Finishing Equipment in Stockhouse 19 and totaled on a consecutive twelve (12)-month basis. [Construction Permit 09-12-025, Section IV.C]
3) The permittee shall record the monthly throughput of barrels of beer packaged from the Carbon Dioxide Regeneration System Unit #3 and totaled on a consecutive twelve (12)-month basis. [Construction Permit 09-12-025, Section IV.D]
4) The permittee shall maintain all records required by this permit condition for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include safety data sheet (SDS) for all materials used. [Construction Permit 062016-009, Special Condition 3.A]

Reporting:

1) The permittee shall submit a permit application for each new emission unit added to the filler operations. The permittee shall also submit an up to date, complete listing of all filers anytime filler is added or removed from the filler operation. At a minimum, this shall include the building and floor location, filler type, line number, and installation date. [Construction Permit 09-12-025, Section III.A]
2) The permittee report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit condition.. [Construction Permit 062016-009, Special Condition 3.B]
3) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

PK 244 and PK 253 Ink-Jet Coders		
Emission Unit	Description	Manufacturer
PK244	Video Jet Ink Coders	Video Jet
PK253	Diagraph Coders	

Permit Condition (PK244 and PK253) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit No. 97-02-016PM2 (Packaging Coder System)

Emission Limitation:

The permittee shall comply with the following limitations:

1) Volatile organic compound (VOC) emissions from the packaging coding system (inks/solvents) shall not exceed 30 tons in any consecutive twelve-month period.
2) Spills and leaks of more than one gallon of coder ink/solvent shall be cleaned up immediately.
3) Rags containing solvents shall be stored in a closed container.

Monitoring:
The permittee shall monitor the usage and VOC contents of inks/solvents on a monthly basis. The VOC content of the inks/solvents shall be determined by formulation data supplied by the manufacturer of the inks/solvents. Calculations of VOC emission rates shall be made monthly.

Recordkeeping:
The permittee shall maintain an accurate record of ink/solvent usage and VOC emission rates on a monthly and rolling twelve (12)-month basis.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after the permittee determined that the emission unit (s) exceeded the emission limitation(s). Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

PK 442 - Beer Packaging -- Line 39 Sanitizing Solution	
Emission Unit	Description
PK442	Beer Packaging -- Line 39 Sanitizing Solution

Permit Condition (PK442) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit No. 98-11-075PM, Issued February 7, 2001
City of St. Louis APCD Permit No. 98-11-075PM – Nullification of Permit Conditions, Issued April 17, 2003
City of St. Louis APCD Permit No. 98-11-075PM2

Operational Limitation:
The permittee shall comply with the following limitations:
1) Ethyl alcohol throughput for sterilizing the filler line shall not exceed 2,000 gallons in any consecutive twelve-month period.
2) Ethanol storage containers shall be closed at all times when not in use.

Monitoring/Recordkeeping:
The permittee shall maintain monthly records of the consumption rates of ethyl alcohol used to sterilize the filler line and totaled on a consecutive twelve-month basis.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after the permittee determined that the emission unit exceeded the operational limitation(s). Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

SH171 and SH172 – D.E. Silos	
Emission Unit	Description
SH171	D.E. Silo 1with Fabric Filter, Building 190
SH172	D.E. Silo 2with Fabric Filter, Building 190

Permit Condition (SH171 and SH172) - 001

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

1) The permittee shall not cause, suffer, allow or permit the emissions of particulate matter (PM) from SH171 and SH172 in excess of 19.20 lb/hr.

   Note: The emission rates in this permit condition apply to the sources individually and not the aggregated sources.

2) The permittee shall not cause, allow or permit the emission of particulate matter from SH171 and SH172 in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

SH314 - D.E. Scale Tank	
Emission Unit	Description
SH314	D.E. Scale Tank with Fabric Filter

Permit Condition (SH314) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Celite Slurry Mixing & Transferring System Permit, Issued March 11, 1993

Operational Limitation:

The permittee shall comply with the following limitations:

1) The throughput of diatomaceous earth (celite) shall not exceed 9,200 tons in any consecutive twelve-month period.
2) The powdery celite must be wetted with water in the educator before entering the slurry mixing tank.

Monitoring:

The permittee shall monitor the throughput of diatomaceous earth on a monthly basis and rolling twelve (12)-month basis.

Recordkeeping:

The permittee shall maintain an accurate record of the monthly and annual throughput of diatomaceous earth.

Reporting:

The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after the permittee determined that the emission unit exceeded the operational limitation(s). Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition (SH314) - 002

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

1) The permittee shall not cause, suffer, allow or permit the emissions of particulate matter (PM) from SH314 in excess of 30.50 lb/hr.
2) The permittee shall not cause, allow or permit the emission of particulate matter from SH171 and SH172 in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases

Monitoring/Recordkeeping/Reporting:

Not required (See Statement of Basis).

**SH191, SH195, SH192, SH196 SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SH177 -
Fermenting Operation (Stockhouses 14, 16, 17, 18 and 20)**

Emission Unit	Description
SH191	190 Chip Tanks (1160 barrels each), Stockhouse 14
SH195	8 Chip Washers/Separators, Stockhouse 14
SH192	128 Chip Tanks (1510 barrels each), Stockhouse 16
SH196	6 Chip Washers/Separators, Stockhouse 16
SH269	Spent Yeast Tank (6000 barrel), Stockhouse 16
SH410	2 Unitanks (6000 barrels each), Stockhouse 16
SH198	25 Vertical Alpha Tanks (23 @ 6000 barrels & 2 @ 5000 barrels), Stockhouse 17
SH199	Vertical Alpha Tank Drop Receiver #1, Stockhouse 17
SH200	Vertical Alpha Tank Drop Receiver #2, Stockhouse 17
SH292	20 Cold Wort Settlers (915 barrels each), Stockhouse 17
SH293	6 Yeast Brinks (209 barrels each), Stockhouse 17
SH294	Spent Yeast Brink (209 barrels), Stockhouse 17
SH193	66 Chip Tanks (3500 barrels each), Stockhouse 18
SH197	12 Chip Washers/Separators, Stockhouse 18
SH515	20 Unitanks (5800 barrels each), Stockhouse 20
SH516	4 Krauesen Tanks (2200 barrels eac), Stockhouse 20
SH177	Spent Beechwood Chip Dumpster

Permit Condition (SH191, SH195, SH192, SH196 SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SH177) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit, Permit No. 09-12-025, Issued March 24, 2010

Emission Limitation:
The permittee shall limit the Fermenting Operation as a whole (stockhouses 14, 16, 17, 18 and 20) to 17.25 million barrels of beer packaged throughput in any consecutive twelve (12)-month period.

Monitoring/Recordkeeping:
The permittee shall record the monthly throughput of beer packaged from the Fermenting Operations (stockhouses 14, 16, 17, 18 and 20) and totaled on a consecutive twelve (12)-month basis.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after the permittee determined that the emission unit(s) exceeded the emission limitation. Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

UT381 and UT382 - Bioenergy Recovery System (BERS)		
Emission Unit	Description	Manufacturer/ Model #
UT381	Biogas Flare, BERS	John Zink EEF-U-12LF Energy Efficient Flare Tip
PK253	Biogas Scrubber, BERS	Custom Design

Permit Condition (UT381 and UT382) - 001

10 CSR 10-6.060 Construction Permits Required
City of St. Louis APCD Permit No. 94-07-051 (Bioenergy Recovery System)
City of St. Louis APCD Permit Matter No. 99-06-035 (Revision of Permit No. 94-07-051)

Emission Limitation:
1) The permittee shall not allow Biogas Flare and Filter (UT381 & UT382) to emit in excess 0.46 tons of Hydrogen Sulfide (H_2S) in any consecutive twelve-month period.
2) The permittee shall limit the throughput of biogas to the flare to 92,000,000 cubic feet per twelve-month period.
3) The permittee shall operate and maintain all equipment according to the principles of Good Engineering Practice.

Monitoring
1) The permittee shall monitor the hydrogen sulfide content of the biogas on a daily basis.
2) The permittee shall monitor the amount of biogas produced on a daily basis by use of a flowmeter. Calculations of annual amounts of biogas produced shall be made monthly.
3) The permittee shall monitor the distribution of biogas to the Boilers (Nos. 8 & 9) and the Biogas Flare on a daily basis.

Recordkeeping:
The permittee shall maintain the following records:
1) Amounts of biogas produced;
2) Biogas flared; and
3) H_2S emissions.

These records shall be maintained as a 12-month rolling total indicating usage and emissions during the previous 12 months.

Reporting:
The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than twenty (20) days after the permittee determined that the emission unit(s) exceeded the emission limitation(s). Any deviations from this permit condition shall also be reported in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Permit Condition (UT381) - 002

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds[3]

Emission Limitation:
The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of SO_2 or more than 35 mg/m^3 of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period. [10 CSR 10-6.260(3)(A)2.]

Monitoring/Recordkeeping:
1) To ensure that emissions of SO_2 concentration do not exceed 500 ppmv, the permittee shall implement a detailed monitoring and recordkeeping program that measures the biogas H_2S content and the volume of biogas fed to the flare. These measured values shall be input to a program that will calculate the SO_2 emissions. In the event that the permit limit is anticipated to be approached, the H_2S content of the biogas shall be appropriately reduced through the addition of ferric chloride.
2) The permittee shall maintain an accurate record of the sulfur dioxide concentration in the exhaust gas based on the monitored hydrogen sulfide concentrations (and the direct relationship of hydrogen sulfide in the digester gas to the amount of sulfur dioxide present in the exhaust gas).

Reporting:
The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

[3] 10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and are federally enforceable. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action. Because 10 CSR 10-6.261 is not applicable to UT381, this permit condition (UT381 – 002) will expire and the limitations thereof will no longer apply to the installation once 10 CSR 10-6.261 is incorporated into the SIP.

UT447 - 250 Gallon Gasoline Storage Tank	
Emission Unit	Description
UT447	250 Gallon above-ground gasoline storage tank located by Utilities; With monthly throughput of less than 10,000 gallons of gasoline

Permit Condition (UT447) - 001

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart CCCCCC National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Emission Limitation:

§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

1) The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [§63.11116(a)]
   a) Minimize gasoline spills; [§63.11116(a)(1)]
   b) Clean up spills as expeditiously as practicable; [§63.11116(a)(2)]
   c) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; [§63.11116(a)(3)]
   d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [§63.11116(a)(4)]
2) The permittee is not required to submit notifications or reports as specified in §63.11125, §63.11126, or Subpart A of 40 CFR Part 63, but the permittee must have records available within 24 hours of a request by the Administrator to document the permittee's gasoline throughput. [§63.11116(b)]
3) Portable gasoline containers that meet the requirements of 40 CFR part 59, Subpart F, *Control of Evaporative Emissions From New and In-Use Portable Fuel Containers*, are considered acceptable for compliance with §63.11116(a)(3). [§63.11116(d)]

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

City of St. Louis Ordinance 68657, §16 Open Burning Restrictions

1) No person shall cause, suffer, allow or permit the open burning of refuse.
2) No person shall conduct, cause or permit the conduct of a salvage operation by open burning.
3) No person shall conduct, cause or permit the disposal of trade waste by open burning.
4) No person shall cause or permit the open burning of leaves, trees or the byproducts therefrom, grass, or other vegetation.
5) It shall be prima-facie evidence that the person who owns or controls property on which open burning occurs, has caused or permitted said open burning.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether

the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
2) The permittee may be required by the director to file additional reports.

3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential
This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention
The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.165 Restriction of Emission of Odors
This requirement is not federally enforceable.
No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.170
Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:

1) The permittee shall not cause or permit to be discharged into the atmosphere from any source, not exempted under 10 CSR 10-6.220, any visible emissions with an opacity greater than 20%.
2) Exception: The permittee may discharge into the atmosphere visible emissions of up to 40% for a period not aggregating more than one (1) six (6) minutes period in any 60 minutes.

Monitoring:

1) The following monitoring procedures shall be used to conduct visible emission readings:
   a) The permittee shall observe the stack exhaust (or stack exhausts if more than one stack) for visible emissions:
      i) May observe numerous stacks from a single location.
      ii) Each reading will be for 1-minute in duration.
      iii) If any visible emissions are observed, the permittee shall focus on those sources.
      iv) The permittee shall ensure that all sources are observed at least once during the calendar year while operating
   b) Determine if visible emissions are "normal" or not.
      i) If not "normal", the permittee shall conduct a Method 9 observation within a reasonable amount of time.
      ii) If Anheuser-Busch initiates corrective action (i.e., shuts down source) to eliminate the visible emissions:
         (1) A follow-Up Method 22-like visible emission observation shall be conducted upon bringing the source on line.
         (2) If situation persists, conduct Method 9 within a reasonable amount of time.

2) The following monitoring schedule must be maintained:
   a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
   b) Should no violation of this regulation be observed during this period then-
      i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
      ii) If a violation is noted, monitoring reverts to weekly.
      iii) Should no violation of this regulation be observed during this period then-
         (1) The permittee may observe once per month.
         (2) If a violation is noted, monitoring reverts to weekly.
3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:
1) The permittee shall maintain records of all required observation results (using Attachment B or equivalent), noting:
   a) Whether any air emissions (except for water vapor) were visible from the emission units,
   b) All emission units from which visible emissions occurred, and
   c) Whether the visible emissions were normal for the process.
2) The permittee shall maintain records of any equipment malfunctions that results in an exceedance of this requirement.
3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C or an equivalent may be used)

10 CSR 10-6.250 Asbestos Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250.
1) This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program.
2) This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program.
3) This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

10 CSR 10-6.280 Compliance Monitoring Usage
1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the director.
2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and

c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
      ii) 10 CSR 10-6.040, "Reference Methods";
      iii) 10 CSR 10-6.070, "New Source Performance Standards";
      iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

10 CSR 10-5.040 Control of Emission From Hand-Fired Equipment

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations
(Rescinded on February 11, 1979, Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.

d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

1) Record Keeping
   a) All required monitoring data 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.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) October 1st for monitoring which covers the January through June time period, and
      ii) April 1st for monitoring which covers the July through December time period.
      iii) Exception. Monitoring requirements which require reporting more frequently than semiannually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
      ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

The permittee shall be able to operate under the following alternative operating scenarios without notifying the permitting authority. The permittee will be required to maintain a log which tracks when each operating mode is in effect.

Alternative Operating Scenarios			
Emission Unit ID	Emission Unit Description	Primary Operating Scenario	Alternative Operating Scenario #1
B08	Boiler 8	Natural Gas	Biogas
B09	Boiler 9	Natural Gas	Biogas

10 CSR 10-6.065(6)(C)3 Compliance Requirements

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;

b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
c) Whether compliance was continuous or intermittent;
d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The applicable requirements are included and specifically identified in this permit, or
   b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
   a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
   b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
   c) The applicable requirements of the acid rain program,
   d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
   e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
   b) That the installation was being operated properly,
   c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
   a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
   b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
   b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)34 Responsible Official

The application utilized in the preparation of this permit was signed by James L. Bicklein, Senior General Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A

Installation - Wide Sulfur Dioxide (SO_2) Emissions Tracking Record
12-Month Rolling Total
(copy as needed)
This record keeping sheet or an equivalent sheet may be used to meet the record keeping requirements for Permit Condition PW001

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H
Month/ Year	Source	Fuel Type	Emission Factor	Emission Factor Source	Amount Combusted (units)	Monthly Total Emissions (tons)	Cumulative SO_2 Emissions (12-Month Rolling Total)[4] (tons)
	Boiler 1 (B01)	Natural gas	0.6 lb/MMcf	AP-42, Table 1.4-1	MMcf		
	Boiler 7 (B07)	Natural Gas	0.6 lb/MMcf	AP-42, Table 1.4-1	MMcf		
	Boiler 8 (B08)	Natural Gas	0.6 lb/MMcf	AP-42, Table 1.4-1	MMcf		
		Biogas	Mass Balance[3]	Mass Balance			
	Boiler 9 (B09)	Natural Gas	0.6 lb/MMcf	AP-42, Table 1.4-1	MMcf		
		Biogas	Mass Balance[3]	Mass Balance	cf		
	2876 HP Generator (CP404)	No. 2 Diesel	1.01S[1] lb/MMBtu[2]	AP-42, Table 3.4-1	MMBtu		
	Biogas Flare (UT381)	Biogas	Mass Balance[3]	Mass Balance	cf		
	Portable Space Heaters (INS500)	Natural Gas	0.6 lb/MMcf	AP-42, Table 1.4-1	MMcf		
	Fixed Heating Units (INS501)						

Note:
1 No. 2 diesel oil contains 137,000 Btu/gal.
2 S = % sulfur by weight in fuel oil, for example, if sulfur content is 0.5%, then S = 0.5.
3 Mass Balance based upon S in fuel and assuming 100% conversion S to SO_2
4 The cumulative SO_2 emissions (tons – Column H) is calculated by adding the monthly SO_2 emissions for each source (Colum G), and adding to previous cumulative SO_2 emissions (Column H).
5 MMcf = million cubic feet; cf = cubic feet

Attachment B

Opacity Emission Observations

Date	Time	Emission Source	Visible Emissions		Excess Emissions		
			No	Yes[1]	Cause	Corrective Action	Initial

[1]If there are visible emissions, the permittee shall complete the excess emissions columns.

Attachment C

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____ _____ _____
YES NO Signature of Observer

Attachment D

Inspection/Maintenance/Repair/Malfunction Log

Emission Unit # _____

Date/Time	Inspection/ Maintenance Activities	Malfunction Activities					
		Malfunction	Impact	Duration	Cause	Action	Initials

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

The Anheuser-Busch, LLC. St. Louis Brewery (SLB) is located in St. Louis, Missouri. The facility's general location is the Southern portion of City of St. Louis in the area generally bounded by South Broadway, Arsenal, Interstate 55 and Lynch Street. SLB produces malt beverages. Primary operations include brewing, packaging, shipping and utilities.

The SLB is on one of the 28 named Facility categories. Based on the brewery's potential to emit, the brewery is a major source of pollutants as defined by the Clean Air Act and 40 CFR Part 52. The facility is classified under the Standard Industrial Classification (SIC) code 2082 for Malt Beverages and the North American Industry Classification System (NACIS) code 312120 Breweries.

Permit Condition PW001:
10 CSR 10-6.065(6)(C)2.A. Federally Enforceable Voluntary Limitation(s):
EPA's August, 2015 Data Requirements Rule, 40 CFR part 51, Subpart BB, Data Requirements For Characterizing Air Quality For Primary SO_2 National Ambient Air Quality Standards (NAAQS) regulation allows the installation three options: monitoring, modeling, or accepting a federally enforceable requirement limiting SO_2 emissions to less than 2,000 tons per year. SLB has chosen to take the 2,000 tons per year limit because since SLB has permanently switched from solid fuels to gaseous fuels, the new SO_2 Potential-To-Emit is less than the 2,000 tons per year. The permit condition requires the permittee to monitor and keep records of SO_2 emissions. SO_2 emitting sources are mainly the boilers, generators and biogas flare.

Existing Process Description:
The SLB produces malt beverages from barley malt, cereal grains (adjuncts), water, hops and yeast. Beer is a beverage manufactured from barley malt, cereal grains (termed adjuncts), water, hops, and brewer's yeast. The process begins with wort production which converts the water, malt and adjunct into a yeast fermentable substrate. Hops are added for flavor and then the wort is fermented under closely controlled conditions resulting in beer. Depending on the product, the fermentation process consists of two-stage operation, the latter taking place in tanks containing a bed of beechwood chips. The beer is ultimately filtered, packaged and pasteurized.

The SLB conducts principally seven (7) operations: grains handling, brewing, fermenting, finishing, packaging and shipping, utilities operation, and wastewater. Primarily, regulated pollutants are emitted from the grain handling, brewing, fermenting, finishing, packaging and utilities operations.

1) Grains Handling:
   The grain handling area includes equipment for unloading, storing and conveying grains that have been received by the facility. Raw materials, known as grains (e.g., malt, rice, and corn grits), are transported to the brewery by rail car and are pneumatically unloaded into storage bins. The grains are pneumatically conveyed through product receivers, which are equipped with fabric filters. The storage bins and pneumatic conveyers are also equipped with fabric filters to control particulate matter (PM) emissions.

   The grain that has been received is then milled and weighed prior to being introduced into the mesh

cookers. Mills grind the grain kernels to facilitate conversion of the starchy interior to sugars in the brewing process. The milled grains fall into scale hoppers located below the mills where they are accumulated to the proper weight for a single brew. The mills, scale hoppers, and associated surge bins are connected to dust collection systems equipped with fabric filters.

The building associated with grains handling contain vacuum systems for cleaning of spilled grains and grain dust. These vacuum systems are vented through cyclones and fabric filters.

The "significant emission units" with Grains Handling are:

- GT300 (GT300-1 through GT300-7) – Grain Transfer system
- GT300 (GT300-8 through GT300-12) – Grain Cleaners
- GT300 (GT300-13 through GT300-15) – Hopper/Feeders
- GT34 - Emergency Truck Loadout
- GT300 (GT300-16 through GT300-24) – Milling and Weighing System
- GU300 (GU300-1 through GU300-12) -

2) Brewing:
The milled grains are blended with water and heated in mash cookers, generating volatile organic compound emissions (VOCs). The cooked mash is then transferred to lauter tuns to separate out the spent grains from the resulting liquid (called wort), where small amounts of VOCs are emitted. The wort is then transferred to brewkettles, where hops are added and the system is heated, generating VOCs. After heating in the brewkettles, the wort is transferred to the starting cellar. In the starting cellar, hot wort is transferred to hot wort receivers. From the hot wort receiver, the wort is then sent through a wort aerator, then the hot wort is cooled in a wort cooler and transferred to cold wort settlers where remaining particulates from the brewing process are allowed to settle out. Cold wort is the transferred to the fermenting tanks. There are no significant emission units within brewing.

3) Fermenting:
During fermenting, yeast is added to the cold wort, generating alcohol and carbon dioxide (CO_2).

During primary fermentation, or alpha fermentation, yeast activity is greatest and most of the wort sugars are converted to alcohol and carbon dioxide. The alpha fermenters operate at low pressure so that most of the CO_2 created during the conversation of sugars is released from the beer. This gas stream is vented. A pure CO_2 atmosphere then forms in the tanks, and is diverted to a gas collection system which is used to maintain an oxygen free, CO_2 blanket that protects the beer. After alpha fermentation, the beer is transferred to secondary fermentation, known as aging or lagering.

Emissions of VOCs from the fermentation process occur initially when CO_2 is vented, and after beer is removed from the tanks. The initial venting of CO_2 carries some ethanol with it due to contact with the beer. After emptying the tanks, the headspace of the tanks, which contains small amounts of ethanol, is purged to atmosphere.

During lagering, the beer is held in cold cellars at elevated pressures to carbonate it and to keep it under CO_2 pressure, free from oxygen. Alpha beer is pumped to drop receivers and on to larger tanks. Depending on the beer, some of it undergoes the kraeusening process, in which a portion of freshly yeasted, unfermented wort is added to an alpha tank.

Beechwood aging improves the yeast-to-beer contact to complete proper aging. The yeast settles onto the extremely large surface area created by the chips. After residing in the larger cellars for appropriate time, the beer's composition and taste have been established.

The tanks are all kept under CO_2 pressure, and emissions occur, as is in fermenting, after beer is emptied from the tanks. The CO_2 vented to the atmosphere contains some ethanol due to contact with beer.

The significant emission units with Fermenting are:

- SH191, SH195, SH192, SH196 SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SH177 – Fermentation Operations (Stockhouses 14, 16, 17, 18, and 20)

4) Finishing:
In the finishing process yeast and unstable protein materials are removed by chillproofing in the schoene tanks and filtration. As beer is pumped from lager cellars, it is cooled to near-freezing temperatures, and chillproofing material (tannin, polyvinylpolypyrrolidone (PVPP), or silica gel) is added. Haze-forming protein materials are removed through carbon absorption onto the chillproofing media. The protein/tannin or protein/silica gel materials settle to the bottom of the schoene tanks, and the beer is decanted off the top directly to filtration.

After clarification in the schoene cellar, the beer is put through perlite or DE filters. After these filter, trap filters prevent bleedthrough of perlite or DE particles. After filtration, the beer is sent to filtered beer tanks and on to packaging.

The significant emission units within Finishing are:

- SH171 and SH172 – D.E. Silos
- SH314 – D.E. Scale Tank

5) Packaging:
After finishing, the beer is sent to packaging where bottles, cans, and kegs are filled. The bottle and can filling processes are similar: the container is first filled with CO_2 which is in turn displaced as beer flows into the container. Prior to closing, any oxygen is purged from the headspace of the container with small CO_2 or water jet. Kegs are similarly filled through a single valve, with an initial fill of CO_2 followed by the product.

Emissions of VOCs in the form of ethanol occur during the filling process. CO_2, which is displaced as the containers are filled, contain a small amount of ethanol due to contact with beer.

Beer is supplied continuously from finishing to the filters during normal packaging operations. The filter bowls are blanketed by CO_2, which minimizes bowl emissions of ethanol. In addition, CO_2 is blown across the tops of the filled cans and bottles, maintaining an oxygen-free headspace in the container until the container is closed.

All products except draft products are pasteurized, which destroys organisms that could affect beer

quality. Products that are not pasteurized are additionally filtered to remove any undesirable organisms. The pasteurizers gradually heat the product in its containers, maintain the appropriate pasteurization temperature for a specified time, and gradually cool the product. Small amounts of ethanol may be emitted from the pasteurizers due to container breakage.

Other operations include application of production codes and dates by the ink coders, and maintenance operations such as conveyor system lubrication. The ink coders are small units located at various points on the packaging lines that applies the production-related data to each individual can, bottle, and case.

The significant emission units within Packaging are:

- PK240, PK242, SH425 through SH433, and UT410 – Beer Production Units
- PK244 and PK253 – Ink-Jet Coders
- PK442 – Beer Packaging – Line 39 Sanitizing Solution

6) Utilities:
In the brewing process, considerable heating and cooling water requirements exist. Heating requirements are met with steam boilers, while cooling requirements are met with ammonia refrigeration system. The bulk of these activities are performed in the utility area. The utility area also contains carbon filters for treating the brewing water.

The brewery has a system to collect, purify, and store CO_2 generated by the fermenters. As part of this system, packed activated carbon towers remove organic compounds and taste and odor contaminants from the CO_2. These carbon beds are periodically recharged or regenerated with hot air streams, which drive off volatiles to the atmosphere.

Process refrigeration is provided by an ammonia system. The system consists of compressors, condensers, receivers, load units (e.g. coolers) and associated piping, valves, flanges, etc. The system also a pumpout system used to evacuate any portion of the ammonia system to allow repairs, maintenance, etc.

Process steam is currently produced by boilers that use combination of natural gas and biogas. The boilers emit criteria pollutants and small amounts of other organic and inorganic compounds.

The significant emission units within Utilities are:

- B01, B07, B08 and B09 - Boilers
- CP404 - Standby Power Generator

7) Bioenergy Recovery System (BERS):
The BERS is a biological system using anaerobic bacteria to reduce organic material in the brewery wastewater. An important and useful byproduct of this process is methane, which is collected and burned in the brewery boilers (as bio-gas fuel) increasing the efficiency of the plant while reducing organic matter in the wastewater and greenhouse gas emissions. BERS consists of a lift station, screening, equalization, reactors, biogas handling system, and an odor control system which includes off-gas scrubbers.

Significant emission units : BERS (UT381 and UT382)

8) Miscellaneous Emission Units:
The facility utilizes the following significant emission unit:
- GN254 – Solvent Clean-up Hood

Permit Changes:
This section presents the changes that have been made since the current Title V Permit (OP2010-109) was issued (October 21, 2010) and became effective (October 20, 2015). The changes include both permitted changes (Construction Permit Amendment of Permit No 97-02—016PM2) and discontinued operations.

1) The Manufacturer's Railway Operation (MFR) used to be owned and operated by the St. Louis Brewery. The installation is no longer owned by the St. Louis Brewery or ABInBev. As such, any and all references to MFR and their operations (listed below) are not included in this renewal permit.
MFR-001 Cold Cleaners MFR Facility
MFR-002 Mart Aqueous Parts Washer MFR Facility
MFR-006 Paint Booths (2 Units)MFR Facility
MFR-003 Cleanup Solvent Use for Paint Equipment MFR Facility

2) In a letter dated December 2, 2015, Anheuser-Busch notified the Air Pollution Control Program per the guidance of MDNR (Kendall Hale letter of February 25, 2015) that the installation ceased firing all solid fuels on Wednesday, July 1, 2015. The installation also dismantled and removed important components of the solid fuel handling equipment for boilers 1, 8 and 9.

   In addition to the removal of the solid fuel handling system, Anheuser-Busch ceased operation of boiler 5 (B05) and also Anheuser-Busch notified the APCP on September 8, 2016 that it is permanently shutting down and removing the EMCON Room emergency generator (CP406).

Updated Potential to Emit (PTE) for the Installation

Pollutant	Potential to Emit (tons/yr)[1]
PM_{10}	262.72
$PM_{2.5}$	183.79
Sulfur Oxides (SO_x)	< 2,000.00
Nitrogen Oxides (NO_x)	531.87
Volatile Organic Compounds	349.83
Carbon Monoxide (CO)	328.10
Hazardous Air Pollutants (HAP's)	14.38
Hexane (C_6H_{14})	6.23
Ammonia (NH_3)	884.87

[1]Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

- Permit Condition PW001 contains plantwide limitations on SO_x of less than 2,000 tons per year.
- Emissions from generators are evaluated at 200 hours of operation based on City of St. Louis Construction Permit No. 96-07-058A (Standby Power Generator) Amendment to Permit No. 96-07-058 (dated Oct. 10, 2002) and Source Registration Permit SR00.018PM.
- HAPs emissions are from the installation's calculations submitted to demonstrate transition from major source of HAPs to an area source of HAPs (letter dated December 2, 2015). After ceasing firing solid fuels, the installation no longer emits individual and combined HAPs over the 10/25 tons per year.
- Annual beer production limits were used to evaluate VOC emissions from the brewing operations.

Reported Air Pollutant Emissions, tons per year

Pollutants	2015	2014	2013	2012	2011
Particulate Matter ≤ Ten Microns (PM_{10})	81.57	149.73	141.18	158.24	181.06
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)	70.45	128.69	119.11	137.69	158.07
Sulfur Oxides (SO_x)	1,623.21	2,867.21	3,3035.50	2,874.28	2,998.41
Nitrogen Oxides (NO_x)	284.81	413.33	429.66	416.26	467.42
Volatile Organic Compounds (VOC)	228.27	219.63	224.16	228.16	215.08
Carbon Monoxide (CO)	92.46	115.90	126.51	111.45	76.68
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)	26.89	55.23	58.14	54.67	61.80
Ammonia (NH_3)	7.21	23.32	9.59	27.06	31.80

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Renewal Application, received April 20, 2015;revised August 1, 2016;
2) Initial Part 70 Operating Permit, Permit No. OP2010-109;
3) 2015 Emissions Inventory Questionnaire, received April 27, 2016;
4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
5) City of St. Louis Air Pollution Control Division (APCD) Construction Permit:

Permit Name/Number	Issue Date
Celite Slurry Mixing & Transferring System Permit	03/11/1993
Permit No. 03-04-005 (Building 149A Paint Booth & 137 Solvent Clean-up Hood – Amendment)	07/22/2003
Source Registration Permit, Permit No.: SR01.049 (100,000 Gallon Storage Tank)	10/01/2001
Permit No. 94-07-051 (Bioenergy Recovery System)	08/14/1995
Permit Matter No. 99-06-035 (Bioenergy Recovery System)	06/10/1999
Permit No. 95-12-138 (250 Gal Diesel Tank, 250 Gal Gas Tank)	12/07/1995
Permit No. 07-07-010 (Boiler 8 and 9)- Amendment to Permit No. 95-10-130	12/07/2007
Permit No. 95-10-124 (Dry Ash Removal System)	06/05/1996
Permit No. 96-07-058A (Standby Power Generator)	11/08/1996
Permit Matter for Permit 96-07-058A	06/10/1999
Amendment to Permit No. 96-07-058A	10/10/2002
Permit No. 98-11-075 (Line 39)	12/17/1998
Permit Matter No. 98-11-075PM	02/07/2001
Permit 98-11-075PM – Nullification of Permit Conditions	04/17/2003
Permit 98-11-075PM2 – Amendment to Permit No. 98-11-075PM	12/05/2003
Source Registration Permit SR00-018PM (EMCON Emer. Gen.)	03/27/2003
Permit No. 97-02-016PM2 (Packaging Coder System)	03/12/2001
Permit No. 09-12-025 (Specialty Packaging Line & Increase Beer Production)	03/24/2010
Permit No. 04-11-020 (Amendments to Four Grains Handling Permits)	01/26/2004
APCP's Concurrence Letter (dated June 30, 1998) to the Coal Sampling, Analysis and Compliance Procedure Document Submitted by Anheuser Busch on June 10, 1998.	
Permit No. 95-05-059 – MFR Paint Booth and Parts Washer Permit	
APCP's Concurrence Letter (dated June 30, 1998) to the Coal Sampling, Analysis and Compliance Procedure Document Submitted by Anheuser Busch on June 10, 1998	
City of St. Louis Air Pollution Control's Concurrence Letter (dated December 5, 2007) to Solid Fuel Sampling, Analysis and Compliance Procedure Document Submitted by Anheuser-Busch as required by Construction Permit No. 07-07-010.	

6) Construction Permit Amendment - Permit Number: 97-02-016PM2A, Project Number: 2013-08-027 for installation of two new ink-jet coders; and
7) Construction Permit No. 062016-009 for Installation of four Unitanks and bulk tank loading, Issued June 14, 2016;

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

1) St. Louis City Ordinances Nos. 64749, 65108, 65488, 65442 and 65645
These ordinances were reviewed and considered at the time the application for this permit was submitted. Since that time, these ordinances have been repealed and replaced with St. Louis City Ordinance No. 68657. The only section of Ordinance 65645 that corresponds to a rescinded ordinance included in the State SIP and therefore federally enforceable is Section 16 - Open Burning Restrictions. This section of the new ordinance is the only section included in the operating permit at this time.

2) 10 CSR 10-5.570, *Control of Sulfur Emissions from Stationary Boilers*
10 CSR 10-5.570(3)(A)2. requires the brewery not to cause or allow the combined total atmospheric emissions of SO_2 from the boilers 3,050 tons during any twelve (12)-month rolling period, however, the Plant Wide Permit Condition PW001 establishes a more stringent SO_2 emission limitation of 2,000 tons per any 12-month rolling period. Complying with the more stringent requirement of PW001 would also be in compliance with 10 CSR 10-5.570(3)(A)2, therefore this rule is not included in this permit.

Construction Permit History

The following revisions were made to construction permits for this installation:

1) City of St. Louis Construction Permit No. 04-06-012
This permit supercedes the limitations, conditions and recordkeeping requirements contained in Permit No. 01-09-028 which superceded the limitations, conditions and record keeping requirements of the following permits:
   - 01-09-029 – Stockhouse;
   - 95-04-051A – Beer Finishing Equipment in Stockhouse 19;
   - 99-06-040 – Permit Matter for Permit No. 95-04-051A and Permit No. 96-08-070;
   - 00-07-039 – Permit Matter for Permit No. 95-04-051A and Permit No. 96-08-070;
   - 96-08-070 – Carbon Dioxide Regeneration System Unit #3; and
   - 96-01-005PM2 – Filler Operations. This permit replaced Permit #s 96-01-005 and 96-01-005PM.

2) City of St. Louis Construction Permit No. 96-01-005PM (dated February 7, 2001).
Permit No. 96-01-005 (dated April 26, 1996) was to cover all filling operations, yet the filling operation of Line 39 was allowed to be permitted separately (Permit No. 98-11-075 (dated December 17, 1998)). Permit No. 96-01-005PM consolidates all filler operations under one permit

and replaces Permit No. 96-01-005. The filling operation of Permit No. 98-11-075 is incorporated into Permit No. 96-01-005PM.

3) City of St. Louis Construction Permit No. 99-06-041A (dated August 5, 2003), Corporate Graphics permit for lithographic presses and plate-making stations.
This permit supercedes all limitations, conditions, reporting and record keeping requirements of Permit Nos. 96-03-028 (dated 6/27/1996) and 96-10-088 (dated 11/21/1996), Permit Matter 99-06-041 (dated 6/8/199) and 96-03-028 Excluded Activity Letter (dated 04/06/2000).
   a) Permit No. 96-03-028 — This permit was issued for the construction and operation of the following presses and plate-making stations with annual usage limits of 16,056 lbs of ink, 28,451 lbs of blanket, roller wash and solvents, and 93,048lbs of developer.
   1985 Heidelberg, Model #TOK Duplicator 1984 AB Dick
   1984 Heidelberg, Model #Kord 64 1985 Heidelberg, Model #MOS
   1985 Heidelberg, Model MOZ 1985 Antec Plate Developer
   Loge Excel 26 Photochemical Developer Loge LL2100 Photochemical Developer
   The permit was modified in 2000 to replace three of the lithographic presses (TOK Duplicator, AB Dick and Kord 64) with one lithographic printer (2000 Heidelberg, Model #QM46-2) as a like kind replacement and also removed the Antec Plate Developer.
   b) Permit No. 96-10-088 — Issued for the installation of another plate-making station (1996 Screen USA LD-T1060) with annual usage limits of 27,900 lbs of fixer and 21,900 lbs of developer.
   c) Permit Matter 99-06-041 — The two annual usage rate limitations for developer usage (93,048 lbs and 21,900 lbs) have been combined into one annual usage condition of114,948 lbs.
   d) The intent of modifying permits 96-03-028 and 96-10-088 is to specifically state that this permit (Permit No. 99-06-041A does regulate all lithographic presses and plate processors under a combined emission limitation (as approved in Permit Matter 99-06-041 letter) and to establish an updating procedure for new/removed lithographic presses and plate processors.
   e) Since the issuance of these permits, Anheuser-Bosch has removed all permitted equipment and ceased all activity related to the Corporate Graphics.

4) City of St. Louis Construction Permit No. 96-07-058A (dated November 8, 1996); Permit Matter dated June 10, 1999) and October 10, 2002 Amendment letter.
Permit No. 96-07-058A is applicable to the Standby Power Generator. Permit No. 96-07-058A includes two permit conditions that limit hours of operation. The October 10, 2002 letter amended Permit No. 96-07-058A by removing the four hours per month operational limitation. The annual emissions provided in the permit were calculated based on the permitted hours of operation. Emissions are adequately limited via the hours of operation limitations that are incorporated in the Part 70 Operating Permit. Therefore, no limitations are established for annual emissions. (Permit Matter dated June 10, 1999).

5) City of St. Louis Construction Permit No. 03-04-005 Building 149A Paint Booth & Building 137 Solvent Clean up Hood Amendment (dated July 22, 2003).
This permit covers Paint Booth 1 in Building 149A and Paint Booth 2 in Building 137. This permit supercedes all limitations, conditions and record keeping requirements of permits dated November 18, 1992, and August 23, 1993, Paint Booth 2 Source Registration (City of St. Louis, dated August 3, 1993); Permit Matter No. 99-06-042 (dated June 14, 1999).

Paint Booth #2 is converted to be used for solvent clean up. No painting will take place in 137 lab

hood type booth. The solvent clean up hood will be used to remove paint from the applicators and not for metal cleaning, therefore is not subject to 10 CSR 10-5.300, Control of Emissions from Solvent Metal Cleaning.

6) In a letter dated November 13, 2003, Anheuser-Busch notified the City of St. Louis Division of Air Pollution that Paint Booth 1 in Building 149A has been shut down.

7) City of St. Louis Construction Permit No. 94-07-051 (dated 8/14/1995); Permit Matter No. 99-06-035 (dated June 10, 1999).
Permit No. 94-07-051 is applicable to the Bioenergy Recovery System. One of the record keeping requirements requires that the quantity of wastewater treated be recorded. This parameter is regulated under other applicable environmental requirements, and thus, the record keeping requirement has been eliminated. (Permit Matter No. 99-06-035). The other Permit No. 94-07-051 conditions are incorporated in the Part 70 Operating Permit.

8) Chill Proofing Process — ACP Process Permit (City of St. Louis, dated February 10, 1993)
The Chill Proofing Process Permit includes permit conditions for emissions and throughput. The emissions throughput limitations are eliminated because the process is out-of-service. As a result, the Chill Proofing Process Permit is not incorporated in the P70 Operating Permit.

9) Grain Unloading System Permit (City of St. Louis, dated May 6, 1992); Permit Matter No. 99-06-037 (dated June 10, 1999).
The following emission units have been replaced with "like-kind" units that are not vented. Therefore, no permit requirements exist for the units. (Permit Matter No. 99-06-037).
   a) GU200 -- Magnetic Separator, Grain Unloading 1
   b) GU203 -- Magnetic Separator, Grain Unloading 2
   c) GU206 -- Magnetic Separator, Grain Unloading 3

10) City of St. Louis Construction Permit No. 97-02-016PM2 (dated March 12, 2001)
Modification of the 100,000 gallon capacity storage tank:
Permit No. 97-02-016PM2 (dated March 12, 2001) modified Permit No. 97-02-016 to regulate all packaging coders under one emission limitation and to establish an updating procedure for new or removed coders.

11) City of St. Louis Source Registration Permit No.: SR01.049 (dated October 1, 2001)
Permit No. SR01-049 replaced permit issued on September 27, 1993. The new permit (SR01-049) allowed an increase in the annual throughput of 500,000 to 19,447,200 gallon per year and a change in fuel type from No. 6 to No. 2 fuel oil.

12) City of St. Louis Source Registration Permit No.: SR00.018PM (dated March 27, 2003)
Source Registration Permit No. SR01-018PM replaced permit number SR00.018 issued on March 29, 2000. The new permit (SR01-018PM) revised the opacity condition of the original permit allowing exceptions during SSM conditions.

13) Miscellaneous Source Registrations (City of St. Louis).
The following emission units have been removed from service. Therefore, no source registration requirements exist for the units.

- RH151 – Spent Grains Dryer 1, Building 158A
- RH152 – Cooling Cyclone 1, Building 158A
- RH153 – Spent Grain Dryer 2, Building 158A
- RH154 - Cooling Cyclone 2, Building 158A
- RH162 – Dried Grains Loadout – Railcar
- SH173 – Precoat and Body Feed Tank, Building 229
- SH253 -- Schoene Receivers (4)
- SH254 -- Schoene Tank, Stockhouse #1
- SH258 -- Schoene Tanks, Stockhouses #7 and #9
- SH262 -- Schoene Beer Balance Tanks
- SH263 -- Filter Beer Balance Tank #1
- SH264 -- Filter Beer Balance Tank #2
- SH265 -- Filter Beer Balance Tank #3
- SH266 -- Filter Beer Tanks, Stockhouses #7 and #9
- SH273 -- Schoene Tanks, Stockhouse #12
- SH277 -- Filter Beer Tanks, Stockhouse #8
- SH280 -- Spent D.E. Slurry Tank
- SH285 -- K-1 Filter
- SH286 -- K-2 Filter
- SH287 -- K-3 Filter
- SH288 -- K-4 Filter
- T351 -- Vehicle Diesel Tank

14) The following units (equipment) have not been operated for more than five years and are slated for demolition. Therefore, they are not included in the operating permit.
- RH159 - Dry Grains Screw Conveyor, Building 158S
- RH160 – Dry Grains Bins, Screw and Bucket Conveyors, Building 158
- RH161 – Grain Dust Transfer from Grain Handling, Building 158
- RH163 – Dried Grains Loadout – Truck 1, Building 158
- RH164 - Dried Grains Loadout – Truck 2, Building 158
- RH167 – Dry Grains Transfer Cyclone and Filter Receiver, Building 158
- RH168 – Dried Grains Vacuum Cleaner, Building 158

15) Permit 95-05-064 – Ammonia Recovery System Permit
This permit was issued on July 24, 1995, for the Ammonia Recovery System and a Corrosion Inhibitor Tank. The permit stated that the maximum emissions of two pounds of VOC from the corrosion inhibitor and 120 pounds of ammonia from the ammonia pump out system per year. On April 18, 2003, the City of St. Louis Air Pollution Control nullified this permit because ammonia is neither a VOC nor a HAP and emissions are very low to be subject to 10 CSR 10-6.060. Requiring limitations and record keeping for the Ammonia Recovery System is overly burdensome.

16) Permit No. 04-11-020 – Amendments to Grain Handling Permits
This permit was issued on January 26, 2004, to amend the four (4) grain handling permits for the different grain handling processes at the installation. This permit shall supercede the limitations, conditions and record keeping requirements contained in Grain Unloading Permit dated May 6, 1992, Grain Transfer Permit dated May 6, 1992, Grain Cleaner Permit dated May 6, 1992, and Grain Milling Permit dated May 6, 1992.

17) Permit No. 07-07-010 – This permit supercedes the limitations, conditions and record keeping requirements contained in Permit No. 95-10-130.

18) Permit No. 09-12-025 — This permit supercedes the limitations, conditions and record keeping requirements contained in Permit No. 04-06-012.

19) Permit No. 062016-009 — This permit is for the installation of four additional 1,000 barrel Unitank fermenters to streamline the fermentation process. The conditions of this permit, "*Total filling production (cans, bottles, draft and tanker trucks) shall be limited to 17.25 MMbbls of beer in any consecutive twelve month period.*" supersede Special Condition 1 of Section II, B., "*Total filling production (cans, bottles, and draft) shall be limited to 17.25 MMbbls of beer in any consecutive twelve month period.*" found in the previously issued construction Permit Number: 09-12-025, issued by the City of St. Louis Department of Health Air Pollution Control.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations.*

The installation is potentially subject to several NSPS rules. Below is a summary of the potentially applicable subparts and the facilities applicability and compliance status to those subparts.

1) 40 CFR Part 60 - Subpart A, *General Provisions.*
The installation becomes subject to Subpart A - General Provisions upon becoming subject to an NSPS standard. If the installation is subject to various NSPS Standards; therefore, they are also subject to Subpart A.

2) 40 CFR Part 60 - Subpart D, *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*.
The provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts (MW) heat input rate (250 million Btu per hour (MMBtu/hr)) and/or each fossil-fuel and wood-residue fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 73 MW (250 MMBtu/hr).

   A fossil-fuel-fired steam generating unit is a furnace or boiler used that burns fossil fuels to produce steam by heat transfer. A fossil fuel and wood residue-fired team generating unit is a furnace or boiler that burns fossil fuel and wood residue to produce steam by heat transfer. Fossil fuels are natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat (vs. solid waste reduction). Wood residue is bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

   The installation has four (4) fossil-fuel-fired steam generators - Boilers 1, 7, 8, and 9. None of these boiler has a heat input rate at or more than 250 MMBTU/hr. Therefore, the Facility is not subject to this NSPS Standard.

3) 40 CFR Part 60 - Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is commenced After September 18, 1978*.
This subpart applies to each electric steam generating unit that commences construction, modification, or reconstruction after September 18, 1978, and has a heat input capacity greater than

73 megawatts (MW) (250 million British thermal units per hour - MMBtu/hr) from combusting fossil fuels.

An electric utility steam-generating unit is any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW net-electrical output to any utility power distribution system for sale. Also, any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is considered in determining the electrical energy output capacity of the affected Facility. Fossil fuel are natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

The installation has four (4) boilers - Boilers 1, 7, 8, and 9. None of the boilers are electric utility steam-generating units. Therefore, the installation is not subject to this NSPS Standard.

4) 40 CFR Part 60 - Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.
This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr).

A steam generating unit is a device that combusts any fuel or byproduct/waste and produces steam or heats water or heats any heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters.

The installation has four (4) boilers - Boilers 1 (B1), 7 (B7), 8 (B8), and 9 (B9). Only two boilers (B8 and B9) were installed after June 19, 1984. Neither of the two boilers is greater than 100 MMBtu /hr. Therefore, the installation is not subject to this NSPS Standard.

5) 40 CFR Part 60 - Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.
This subpart applies to each steam generating unit that commences construction, modification, or reconstruction after June 9, 1989, and that has a heat input capacity from fuels combusted in the steam generating unit of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr) or less, but more than 2.9 MW (10 MMBtu/hr).

A steam generating unit is a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

The installation has four (4) boilers - Boilers 1, 7, 8, and 9. None of the boilers were installed after June 19, 1989. Therefore, the installation is not subject to this NSPS Standard.

6) 40 CFR Part 60 - Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids*.
This subpart applies to each petroleum liquid storage vessel with a storage capacity greater than 151,412 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commenced construction or modification after March 8, 1974, and prior to May 19, 1978. Additionally, this subpart also applies to each petroleum liquid storage vessel with a storage capacity greater than 246,052 liters (65,000 gallons) and commenced construction or modification after June 11, 1973, and prior to May 19, 1978.

A Petroleum liquid is any petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not include Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D.

The installation has a 100,000 gallon No. 2 Fuel Oil storage tank, but construction or modification of the tank did not occur after June 11, 1973 and prior to May 19, 1978. Additionally, the tank was abandoned in October, 2010. Therefore, the installation is not subject to this NSPS Standard.

7) 40 CFR Part 60 - Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction Or Modification Commenced After May 19, 1978, and Prior to July 23, 1984*.
This subpart applies to each petroleum liquid storage vessel with a storage capacity greater than 151,412 liters (40,000 gallons) and commenced construction after May 18, 1978.

A Petroleum liquid is any petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not include Nos. 2 through 6 fuel oils, gas turbine fuel oils Nos. 2-GT through 4-GT, or diesel fuel oils Nos. 2-D and 4-D.

The Facility has a 100,000 gallon No. 2 Fuel Oil storage tank, but construction or modification of the tank did not occur between May 18, 1978 and July 23, 1984. Additionally, the tank has been abandoned since October 2010. Therefore, the installation is not subject to this NSPS Standard.

8) 40 CFR Part 60 - Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction Or Modification Commenced After July 23, 1984*.
This subpart applies to any tank storing a volatile liquid with a design capacity greater than or equal to 40 cubic meters (10,566-gallons) and installed after July 23, 1984. Note - Volatile organic liquid (VOL) as defined in this subpart means any organic liquid which can emit volatile organic compounds into the atmosphere except those VOL's that emit only those compounds which the Administrator has determined do not contribute appreciably to the formation of ozone.

The installation has a 100,000 gallon fuel oil tank (CP405) constructed/retrofitted after July 1984, that is subject to paragraphs (a) and (b) of §60.110b of this subpart.

NOTE: This subpart does not apply to vessels used to store beverage alcohol.

9) 40 CFR Part 60 - Subpart Y, *Standards of Performance for Coal Preparation Plants*.
The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day and commenced construction

or modification after October 24, 1974: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

The installation used to have coal processing and conveying equipment, a coal storage system, and a coal transfer and loading system. Additionally, the facility had the capacity to process more than 200 tons of coal per day. Therefore, the facility was subject to this Subpart. However, the installation ceased firing all solid fuels on Wednesday, July 1, 2015 and removed the coal processing equipment from service and, thus, the facility will not be subject to this NSPS standard.

10) 40 CFR Part 60 - Subpart DD, *Standards of Performance for Grain Elevators*.
This subpart applies to each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations at a grain terminal elevator or any grain storage elevator which commences construction, modification, or reconstruction after August 3, 1978.

A grain terminal elevator is a grain elevator which has a permanent storage capacity of more than 88,100 m3 (ca. 2.5 million U.S. bushels), except those located at, amongst others, a brewery. A grain storage elevator is any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant.

While the brewery stores and processes grain, rice, corn, etc... they are neither a grain terminal elevator nor a grain storage elevator. Therefore this rule does not apply to the brewery..

11) 40 CFR Part 60 – Subpart WW, *Standards of Performance for the Beverage Can Surface Coating Industry.*
This subpart applies to each beverage can surface coating lines which commenced construction, modification, or reconstruction after November 26, 1980 and that conduct the following:
- Exterior base coat operation,
- Over-varnish coating operation, and
- Inside spray coating operation.

An exterior base coat operation is a beverage can surface coating line used to apply a base- coating to the exterior of a two-piece beverage can body. The exterior base coat provides corrosion resistance and a background for lithography or printing operations. An over-varnish coating operation applies a coating over ink which reduces friction for automated beverage can filling equipment, provides gloss, and protects the finished beverage can body from abrasion and corrosion. An inside spray coating operations is a beverage can surface coating line used to apply a coating to the interior of a two-piece beverage can body.

The installation applies a date stamp to the bottom of aluminum cans. This process is considered a surface coating operation. The process does not apply either an exterior base coat, an overvarnish coating, or an inside spray coating. Therefore, this subpart does not apply.

The installation does not coat any portion of the lid. Therefore, this subpart does not apply.

a) 40 CFR Part 60 – Subpart IIII. *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.
This subpart is applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons who construct, reconstruct, or modify an engine after July 11, 2005. A compression ignition is a type of stationary internal combustion engine that is not a spark ignition engine.

The installation has compression ignition internal combustion engine (CP404), Standby Power Generator (CP404)
- Manufacturer: Caterpillar
- Fuel: Diesel
- Installation Date: 1996
- Capacity: 2876 HP / 21 MMBTU

The engine was neither constructed, reconstructed, nor modified after July 11, 2005. Therefore, this subpart does not apply.

12) 40 CFR Part 60 – Subpart JJJJ. *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*.
This subpart is applicable to owners and operators of stationary spark ignition (SI) internal combustion engines (ICE) who construct, reconstruct, or modify an engine after July 12, 2006. A stationary internal combustion engine is any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The Facility has not installed, reconstructed or modified a spark ignition internal combustion engines since July 12, 2006. Therefore, this subpart does not apply.

13) NSPS Applicability Summary
The installation is not subject to any of the NSPS standards.

Maximum Achievable Control Technology (MACT) Applicability
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations.*
National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated after the 1990 Clean Air Act Amendments are found in 40 CFR Part 63. The 1990 Clean Air Act Amendments, significantly expanded EPA's authority to regulate hazardous air pollutants. These standards require application of technology based emissions standards referred to as Maximum Achievable Control Technology (MACT). Consequently, these post-1990 NESHAPs are also referred to as MACT standards. MACT is a technology-based standard, as opposed to the original conception of NESHAPs as a risk-based standard.

Section 112 of the Clean Air Act lists 187 hazardous air pollutants to be regulated by source category. EPA has identified "source categories" that must meet technology requirements to control HAP emissions and is required to develop standards for all industries that emit one or more of the HAPs in significant quantities. The standards are based on emissions levels already achieved by best- performing similar facilities.

Industries subject to MACT standards are classified as either major sources or area sources.

- Major sources are sources that emit 10 tons per year of any of the listed HAPs, or 25 tons per year of a mixture of HAPs.
- Area sources are sources that emit less than 10 tons per year of a single HAP or less than 25 tons per year of a combination of HAPs. Area sources must employ Generally Available Control Technology (GACT) which is based on appropriate practices/ techniques commercially available and taking into account economic and technical considerations.

MACT standards are applicable to major sources, while GACT standards are applicable to area sources.

The installation has the potential to emit various HAPs. The installation combusts natural gas and biogas, each of which has the potential to emit several different HAPs (e.g., Benzene, Formaldehyde, and Toluene). Additionally, the installation produces Acetaldehyde in the brewing process.

After ceasing firing solid fuels, the installation no longer emits individual and combined potential HAPs over 10/25 tons per year, thus the installation has transitioned from a major source of HAPs to an area source of HAPs.

Based upon a comparison of the installation operations to each area source MACT/GACT Standard, the installation is potentially subject to the following MACT/GACT standards: (NOTE: This is not an analysis of every MACT/GACT standard, it is an analysis of the MACT/GACT standards that are potentially applicable to the installation).

1) 40 CFR Part 63, Subpart T - *National Emission Standards for Halogenated Solvent Cleaning.*
This subpart applies to individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines that use any solvent containing methylene chloride (CAS No. 75- 09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1- trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than five percent (5%) by weight, as a cleaning and/or drying agent. [§ 63.460(a)]

   The installation does not operate any solvent cleaning machines as defined within §63.461. Therefore, this subpart does not apply.

2) 40 CFR Part 63, Subpart CCCC - *National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast*
This subpart applies to nutritional yeast manufacturing facilities that are, are located at, or are part of a major source of hazardous air pollutants (HAPs) emissions.

   A manufacturer of nutritional yeast is a facility that makes yeast for the purpose of becoming an ingredient in dough for bread or any other yeast-raised baked product, or for becoming a nutritional food additive intended for consumption by humans. A manufacturer of nutritional yeast does not include production of yeast intended for consumption by animals, such as an additive for livestock feed.

   The St. Louis Brewery is currently an area source of HAPs and does not either use yeast in dough, yeast raised baked products or for becoming a nutritional food additive. Therefore, the St. Louis Brewery is not subject to this subpart

3) 40 CFR Part 63, Subpart MMMM - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*.
This rule applies to a facility that owns or operates a miscellaneous metal parts and products surface coating operation that is a major source, or is located at a major source, or is part of a major source of HAP emissions. An affected source that uses 946 liters (250 gallons) per year, or more, of coatings that contain hazardous air pollutants (HAP) could be subject to this rule.

   The Manufacturer's Railway Operation (MFR) operates paint booth (Emission Unit MFR006) for the application of paints and insulating varnish to locomotive parts. The painting operation was part of a major source and the operation was subject to this rule. Since the MFR is no longer owned and operated by the St. Louis brewery or ABInBev, the St. Louis Brewery will no longer be subject to 40 CFR Part 63, Subpart MMMM.

4) 40 CFR Part 63, Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).*
The Subpart ZZZZ standards are applicable to Reciprocating Internal Combustion Engines (RICE) located at both major and/or area sources of hazardous air pollutants (HAPs) and RICE with a site rating of less than or equal to 500 brake horsepower (bhp). In addition, the standards for existing non-emergency compression ignition (CI) engines with a site rating of greater than 500 bhp at major sources and revised provisions related to Startup, Shutdown, and Malfunction (SSM) events for engines previously regulated under the rule. Finally, emergency RICE with a rating greater than 500 bhp located at a major source are subject to this rule, but with limited requirements.

   The installation operates standby power generator (CP404) whose operations are limited to emergency situations. The engine was installed prior to June 12, 2006 and according to §63.6590(a)91)(iii) of this subpart, stationary RICE located at an area source of HAP emissions is existing if commenced construction or reconstruction before June 12, 2006. The engine is subject to the Work Practice Standards, Maintenance Plan, Monitoring, and Recordkeeping requirements. Therefore, this subpart applies.

5) 40 CFR Part 63 Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.*
The Subpart applies to a facility that owns or operates a industrial boilers, institutional boilers, commercial boilers, and process heaters that is a major source, or is located at a major source, or is part of a major source of HAP emissions. A process heater is defined as a unit in which the combustion gases do not directly come into contact with process material or gases in the combustion chamber (e.g., indirect fired). A boiler is defined as an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water.

   After ceasing firing solid fuels, the St. Louis Brewery no longer emits individual and combined HAPs over the 10/25 tons per year and therefore is not subject to this subpart.

6) 40 CFR Part 63, Subpart BBBBBB - *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.*
The purpose of this subpart is to establish national emission limitations and management practices for hazardous air pollutants (HAP) emitted from area source gasoline distribution bulk terminals,

bulk plants, and pipeline facilities. This subpart applies to each area source bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant.

A bulk gasoline terminal is any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater. The facility does not have a gasoline throughput of 20,000 gallons per day or greater. Thus, the Facility is not a bulk gasoline terminal.

A bulk gasoline plant is any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank, and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, and has a gasoline throughput of less than 20,000 gallons per day. The facility receives and utilizes gasoline on-site. The facility does not load gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities. Thus, the Facility is not a bulk gasoline plant.

A pipeline breakout station is a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for re-injection and continued transportation by pipeline or to other facilities. The facility is not located along a pipeline nor do they receive and store gasoline from a pipeline. Thus, the Facility is not a pipeline breakout station.

A pipeline pumping station is a facility along a pipeline containing pumps to maintain the desired pressure and flow of product through the pipeline, and not containing gasoline storage tanks other than surge control tanks. The facility is not along a pipeline and does not contain pumps to maintain the desired pressure. Thus, the Facility is not a pipeline pumping station.

The facility is not either a bulk gasoline terminal, bulk gasoline plant, pipeline breakout station, or a pipeline pumping station. Therefore, the facility is not subject to this rule.

7) 40 CFR Part 63, Subpart CCCCCC - *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.*
The purpose of this subpart is to establish national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). The affected source to which this subpart applies is each GDF that is located at an area source.

A gasoline dispensing facility (GDF) is any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

The installation receives gasoline, stores it in a tank, and dispenses it into motor vehicles and/ or nonroad engines. Therefore, the installation is subject to this rule.

8) 40 CFR Part 63, Subpart HHHHHH - *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.*

This rule applies to an area source that strips paint using methylene chloride, sprays coatings to motor vehicles and mobile equipment, and/or sprays coatings that contain chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) to a plastic and/or metal substrate on a part or product.

The St. Louis Brewery is currently an area source of HAPs and applies a date stamp to the beverage containers, some of which are aluminum cans. This coating activity is considered a miscellaneous surface coating operation. The installation does not use coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part of the beverage containers. Therefore, this rule does not apply.

9) 40 CFR Part 63, Subpart JJJJJJ - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.*
This subpart applies to boilers at area source facilities that burn coal, oil, biomass, or non-waste materials. Boilers burning natural gas as defined in this regulation would not be affected by the subpart.

This regulation does not apply to the boilers because these boilers are biogas and natural gas fired units. The rule exempts boilers fired with these types of fuels. According to this rule, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel.

10) MACT Applicability Summary:
The St. Louis Brewery is currently area source HAPs after the fuel switch. Based upon a comparison of the installations operations to each MACT Standard (area and major standards), the installation is subject to the following GACT/MACT Standards:
- Subpart ZZZZ - Reciprocating Internal Combustion Engines (RICE) - 40 CFR 63.6580
- Subpart CCCCCC - Gasoline Dispensing Facilities - 40 CFR 63.11110

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability
10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*.
National Emission Standards for Hazardous Air Pollutants (NESHAPS) are stationary source standards for hazardous air pollutants. NESHAPS were originally required by the 1970 Clean Air Act (CAA). These standards were developed for sources and source categories that were determined to pose adverse risk to human health by the emission of HAPs. The Part 61 NESHAPs regulate only 7 hazardous air pollutants - Asbestos, Beryllium, Mercury, Vinyl Chloride, Benzene, Arsenic, Radon/Radionuclides. Prior to 1990, the Clean Air Act required EPA to set standards for each toxic air pollutant individually, based on its particular health risks. Thus, NESHAPs are risk based standards that apply to all existing and new/ modified sources regardless if they are a minor or major HAP Facility. (NOTE: This is not an analysis of every NESHAP standard; it is an analysis of the NESHAP standard that is potentially applicable to the installation).

1) 40 CFR Part 61 Subpart M – *National Emission Standard for Asbestos.*
The installation is not subject to any NESHAP standard with the exception of Subpart M - National Emission Standard for Asbestos. The installation is potentially subject to Subpart M. If the

installation conducts any demolition or renovation projects to a building(s) containing asbestos, they must determine applicability with the following NESHAP regulations:

- Demolition and Renovation - 40 CFR 61.145
- Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying - 40 CFR 61.150

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM).*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Other Regulatory Determinations

1) 10 CSR 10-6.260, *Restriction of Emissions of Sulfur Compounds.*
   10 CSR 10-6.260(3)(A)2. applies to CP404, the internal combustion engine (CP404) and biogas flare (UT381) because these are sources of sulfur compounds, but are not sources of indirect heating. 10 CSR 10-6.260 (3)(B)3.B. and 10 CSR 10-6.261(3)(B)2.B. apply to the boilers (B01, B07, B08 and B09), because they are sources of indirect heating with a capacity of less than 2,000 MMBtu/hr and located in the City of St. Louis; however, neither 10 CSR 10-6.260(3)(B)3.B nor 10 CSR 10-6.261(3)(B)2.B contain any emission limit/standard for units that burn gaseous fuels/biogas.

   10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and thus are federally enforceable. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action. Because 10 CSR 10-6.261 is not applicable to UT381, the permit condition incorporating the requirements of 10 CSR 10-260 will expire and the limitations thereof will no longer apply to the UT381 once 10 CSR 10-6.261 is incorporated into the SIP.

2) 10 CSR 10-6.405, *Restriction of Particulate Matter Emissions Fuel Burning Equipment Used for Indirect Heating.*
   The brewery operates the following fuel burning equipment used for indirect heating:
   - B01 – Boiler 1 (constructed 1985) -- 230 MMBtu/hr; Fuel Type: Natural Gas.
   - B07 – Boiler 7 (constructed 1966) -- 232.6 MMBtu/hr; Fuel Type: Natural Gas.
   - B08 – Boiler 8 (constructed 1988) -- 99 MMBtu/hr; Fuel Type: Natural Gas and Biogas.
   - B09 – Boiler 9 (constructed 1988) -- 99 MMBtu/hr; Fuel Type: Natural Gas and Biogas.

   According to the APCP Compliance and Enforcement letter to Anheuser-Busch, dated May 11, 2015, the boilers meet the criteria defined in 10 CSR 10-6.405(C) and therefore are exempt from demonstrating compliance with this rule.

3) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
   10 CSR 10-6.400 limits the amount of particulate matter that is allowed from an emission unit, and is dependent on the process weight rate material processed. The emission units to which this rule

applies are listed below. The following calculations provide the allowable particulate emission rate based on 10 CSR 10-6.400 and the potential (maximum) emission rate including particulate emission control equipment. Potentials to emit presented below were calculated based on sources Maximum Design Rate (MDR). If the emissions from these emission units can not violate the limits of this rule then evidence of this is demonstrated in the following calculations.

One of the following equations from 10 CSR 10-6.400 is used to calculate the PM allowable limit:

$E = 4.10P^{0.67}$ for process weight rates up to 30 tons (60,000 lbs) per hour, and

$E = 55.0P^{0.11} - 40$ for process weight rates greater than 30 tons (60,000 lbs) per hour

Where: E = rate of emission in lb/hr; and

P = process weight rate in tons/hr (maximum hourly design rate)

a) At maximum design rates, the uncontrolled potential PM emission rates for the units listed in the table below based on AP-42 factors are less than the allowed exemption level of 10 CSR 10-6.400(1)(B)11. (i.e., 0.5 lbs/hr), therefore these units are not subject to the provisions of this rule. Emission factors used are from AP-42 [*§9.91, Grain Elevators and Processes] and **2015 EIQ.

Emission Unit	Max. Design Rate (ton/hr)	Control Device			PM Emission Factor (EF)		PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)	With Control (lb/ton)	Without Control (lb/ton)	Without Control (lb/hr)	With Control (lb/hr)	Limit (lb/hr)
SH171	10.00	Fabric Filter	100	99.70	---	0.025*	0.25	0.001	19.18
SH172	10.00	Fabric Filter	100	99.70	---	0.25*	0.25	0.001	19.18
GN306	1.00	None			---	0.2**	0.20	---	4.10
GU248	1.00	None			---	0.45**	0.45	---	4.10
PB186	1.00	None			---	0.45**	0.45	---	4.10
PB223	1.00	Fabric Filter	100	99.70	---	0.45**	0.45	0.001	4.10
PB224	0.70	Fabric Filter	100	99.70	---	0.2**	0.14	0.001	3.23
SH428	0.20	Fabric Filter	100	99.70	---	0.72**	0.14	0.001	1.39

b) At maximum design rates, the uncontrolled potential PM emission rates for the units listed in the table below based on AP-42 factors [*§9.9.1, Table 9.9.1-1] are less than their corresponding allowable PM emission limits. No monitoring, record keeping or reporting is required.

Emission Unit.	Max. Design Rate (ton/hr)	Control Device			PM Emission Factor (EF)		PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)	With Control (lb/ton)	Without Control (lb/ton)	Without Control (lb/hr)	With Control (lb/hr)	Limit (lb/hr)
GT300-1	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-2	33.75	Fabric Filter	100	99.70	---	0.061	2.06	0.006	41.00
GT300-3	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-4	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-5	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42

Emission Unit.	Max. Design Rate (ton/hr)	Control Device			PM Emission Factor (EF)		PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)	With Control (lb/ton)	Without Control (lb/ton)	Without Control (lb/hr)	With Control (lb/hr)	Limit (lb/hr)
GT300-6	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-7	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-8	33.75	Fabric Filter	100	99.70	0.075		5.06	0.015	41.00
GT300-9	33.75	Fabric Filter	100	99.70	0.075		5.06	0.015	41.00
GT300-10	33.75	Fabric Filter	100	99.70	0.075		5.06	0.015	41.00
GT300-11	33.75	Fabric Filter	100	99.70	0.075		5.06	0.015	41.00
GT300-12	33.75	Fabric Filter	100	99.70	0.075		5.06	0.015	41.00
GT300-13	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-14	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-15	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT34	67.50	None			---	0.061	4.12	---	47.42
GT300-16	67.50	Fabric Filter	100	99.70	---	0.025	1.69	0.005	47.42
GT300-17	67.50	Fabric Filter	100	99.70	---	0.025	1.69	0.005	47.42
GT300-18	67.50	Fabric Filter	100	99.70	---	0.061	4.12	0.012	47.42
GT300-19	67.50	Fabric Filter	100	99.70	---	0.025	1.69	0.005	47.42
GT300-20	67.50	Fabric Filter	100	99.70	---	0.025	1.69	0.005	47.42
GT300-21	33.75	Fabric Filter	100	99.70	---	0.025	0.84	0.003	41.00
GT300-22	33.75	Fabric Filter	100	99.70	---	0.025	0.84	0.003	41.00
GT300-23	33.75	Fabric Filter	100	99.70	---	0.061	2.06	0.006	41.00
GT300-24	33.75	Fabric Filter	100	99.70	---	0.025	0.84	0.003	41.00
GU300-1	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-2	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-3	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-4	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-5	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-6	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-7	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-8	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03

Emission Unit.	Max. Design Rate (ton/hr)	Control Device			PM Emission Factor (EF)		PM Emission		
		Type	Capture Efficiency (%)	Control Efficiency (%)	With Control (lb/ton)	Without Control (lb/ton)	Without Control (lb/hr)	With Control (lb/hr)	Limit (lb/hr)
GU300-9	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-10	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-11	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
GU300-12	52.50	Fabric Filter	100	99.70	---	0.061	3.20	0.010	45.03
SH314	20.00	Fabric Filter	100	99.70	---	0.061	1.22	0.004	30.51

c) According to 10 CSR 10-6.400(1)(B)7., the following fugitive sources are not subject to this rule.

Emission Unit No.	Description of Emission Unit
GN306	Card Board Bailer, Building 137 (Bevo)
GT300	Grain Transfer System (Contained within Building)
GN311	Welding Various
GU248	Five (5) Vacuum Cleaner System (grain Area)
PB186	Malt Transfer from Elevator H to Pilot Brewery, Pilot Brewery
PB228	Malt Dryer – Pilot Brewery
UT446	Cooling Towers

4) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*.
Historically, the St. Louis Brewery has not emitted visible emissions while under normal operation. Visible emissions observations will be performed in frequencies as stated in the permit and logged according to the monitoring and record keeping requirements. Detecting visible emissions is an indicator of operating problems and gives the permittee a chance to take corrective actions before exceeding the opacity limit. Conducting Method 9 observations after the observation of visible emissions determines whether the emissions exceed the opacity limit, or confirm that corrective action has restored operation. Therefore, the tiered monitoring frequency of visible/no visible emissions observations using Method 22 like procedures is considered sufficient.

5) 10 CSR 10-5.510, *Control of Emissions of Nitrogen Oxide*.
In Previous years when Boiler 5 was in service Anheuser-Busch had the option of emissions averaging, as allowed in the Operating Permit No. OP2010-109 and 10 CSE 10-5.510(3)(G), to demonstrate compliance with the NO_X emission limits specified therein for Boilers 1 and 5, which were identical units. In order to use the option of emission averaging for these boilers Anheuser-Busch was required to conduct testing for NO_X under varying loads. Now that Boiler 5 is no longer in service Anheuser-Busch no longer has the option of emission averaging between the two units; this means testing at multiple loads is no longer needed to be compliant with the NO_X emission limits specified in 10 CSE 10-5.510(3)(G) for Boiler 1.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

The draft P70 Operating Permit, Project 2015-04-056, for Anheuser-Busch, LLC (510-0003) was placed on public notice as of September 23, 2016, for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm. on Friday, September 23, 2016. On October 21, 2016, the Air Pollution Control Program received comments from Mark A. Smith, Air Permitting and Compliance Branch Chief for EPA Region VII.

Comment #1: MDNR's customary practice is to provide examples of the data collection records used by the permittee to verify compliance with their permit conditions. These examples are normally included in the operating permit as attachments available for public review and comment. However, this draft operating permit renewal for the Anheuser-Busch Brewery in St. Louis has several permit conditions that require the permittee to collect compliance verification data and there are no examples of the data sheets on public notice for review and comment. The specific permit conditions lacking the customary compliance verification worksheets include:

- Permit Condition (B01 and B07)-001
- Permit Condition (B08 and B09)-001
- Permit Condition (B08 and B09)-002
- Permit Condition (CP404)-004
- Permit Condition (GT300)-001 and (GT34)-001
- Permit Condition (PK240 through PK242)-001 , (SH425 through SH433)-001, (SH717, SH729 and SH907)-001, and (UT410)-001
- Permit Condition (PK244 and PK253)-001
- Permit Condition (PK442)-001
- Permit Condition (SH314)-001
- Permit Condition (SH191, SH195, SH192, SH196, SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SHl77)-001
- Permit Condition (UT381 and UT382)-001

EPA recommends MDNR follow their customary practice and include all compliance verification datasheets as attachments in this operating permit.

Response to Comment: *Anheuser-Busch uses its own recordkeeping system and is in the process of enhancing the current recordkeeping system to meet the regulatory requirements of this permit. Therefore, the Air Pollution Control Program does not believe an example recordkeeping form is necessary. EPA may request to review the installation records to determine compliance. The Air Pollution Control Program regularly reviews recordkeeping forms during site inspections.*

Comment #2: All requirements in all permit conditions shall be enforceable for a practical matter. EPA's primary guidance on practical enforceability is contained in "*Guidance Limiting Potential to Emit in New Source Permitting*," dated June 13, 1989. One of the important measures of practical enforceability is for the requirements to identify the "who," "what," "where," "when," "how," and "how often." The following requirements in the identified permit conditions are not practically enforceable:

- Emission limitation 2) and 3) in Permit Condition (B08 and B09)-002;
- Emission limitation and monitoring/record keeping requirement in Permit Condition (CP404)-001;

- Operational limitations in Permit Condition (CP404)-004
- Emission limitations 2), 3), and 4) in Permit Condition (PK240 through PK242)-001; Permit Condition (SH425 through SH433)-001; Permit Condition (SH717, SH739 and SH907)-001 and Permit Condition (UT410)-001;
- Emission limitation 2) and 3) in Permit Condition (PK244 and PK253)-001 ;
- Monitoring / record keeping in Permit Condition (PK442)-001;
- Emission limitation and monitoring / record keeping in Permit Condition (SH191, SH195, SH192, SH196, SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SHl77)-001; and
- Emission limitation in Permit Condition (UT381)-002

EPA recommends MDNR modify all of these requirements to ensure that each one is enforceable from a practical matter.

Response to Comment:

- *Emission limitation 2) in Permit Condition (B08 and B09)-002: Special condition of Construction Permit No. 07-07-010 requires the permittee not to exceed the rated design rate of each boiler. This requirement is based on the design specifications of the boilers. The design rates of the boilers cannot be changed without physical modification. Therefore, no change is made to the draft as a result of this comment:*

  Emission limitation 3) in Permit Condition (B08 and B09)-002: The permittee is required by recordkeeping #1 and #2 to show compliance that the fuel use is either natural gas or biogas. These recordkeeping requirements will ensure that the limit is met. Therefore, no change is made to the draft as a result of this comment.

- *Emission limitation and monitoring/record keeping requirement in Permit Condition (CP404)-001 are modified as recommended.*

- *Operational limitations in Permit Condition (CP404)-004 are modified as recommended.*

- *Emission limitations 2), 3), and 4) in Permit Condition (PK240 through PK242)-001; Permit Condition (SH425 through SH433)-001; Permit Condition (SH717, SH739 and SH907)-001 and Permit Condition (UT410)-001 are modified as recommended.*

- *Emission limitation 2) and 3) in Permit Condition (PK244 and PK253)-001: These are operating procedures pertaining to spills, leaks and waste disposal that the permittee has to follow and take corrective actions immediately. Therefore, no change is made to the draft as a result of this comment.*

- *Monitoring / record keeping in Permit Condition (PK442)-001: This permit condition is modified as recommended.*

- *Emission limitation and monitoring / record keeping in Permit Condition (SH191, SH195, SH192, SH196, SH269, SH410, SH198, SH199, SH200, SH292, SH293, SH294, SH193, SH197, SH515, SH516 and SHl77)-001: This permit condition is modified as recommended.*

- *Emission limitation in Permit Condition (UT381)-002: This permit condition is modified as recommended.*

Comment #3: Record keeping requirements in Permit Condition (UT381 and UT382)-001 require the permittee to maintain **monthly moving average** (emphasis added) indicating usage and emissions during the previous 12 months. The emission limitations for Permit Condition (UT381 and UT382)-001 are specified as 12-month consecutive totals and daily totals. EPA recommends MDNR replace the "monthly moving average" with the term "12-month rolling total."

Response to Comment: *This permit condition is modified as recommended.*

Comment #4: Attachment A is an example of the Installation-Wide Sulfur Dioxide (SO_2) Emission Tracking Record to be used by the permittee to track compliance with a voluntary plant wide limit as specified in Permit Condition PW001. Attachment A indicates the permittee is using AP-42 emission factors to determine monthly and 12-month rolling total emissions to verify compliance with the voluntary 2,000 tons per year limit. In the introduction to AP-42, Volume 1, Fifth Edition, it says that use of these emission factors may be appropriate for making emission estimates for area wide inventories and in some applicability determinations and in establishing permit fees. However, AP-42 emission factors are neither EPA recommended emission limits nor standards. Use of these factors as a source-specific permit limit and / or emission regulation compliance determination is not recommended by EPA. Also, the sulfur dioxide discussion presented in the introduction to AP-42 Section 1.4, *Natural Gas Combustion*, says a sulfur mass balance should be used to determine SO_2 emission from natural gas-fired boilers. Attachment A indicates the permittee is using a "Mass Balance" to calculate SO_2 emissions when burning biogas in their boilers and EPA recommends the permittee use the "Mass Balance" method for determining SO_2 emissions when combusting natural gas.

Additionally, Attachment A shall capture SO_2 emissions from the entire installation, however, it appears that MDNR and the permittee have overlooked the contribution from insignificant sources and / or emission units without specific emission limitations. The sources which appear to have been overlooked include, but may not be limited to, portable and fixed heating units (reference number INS500 and INS501). To effectively limit SO_2 emissions as specified, the SO_2 limits of PW001 must apply at all times to all actual emission units, and all actual SO_2 emission units must be considered in determining compliance with the limit. The draft operating permit is unclear whether all actual SO_2 emissions must be considered in determining compliance with the limit as Attachment A appears to capture only the emissions associated with boilers, flare and the emergency generator. However, there does not appear to be any tracking associated with SO_2 emissions from other sources such as insignificant sources and natural gas combustion.

In its response to a petition filed against the Hu Honua Bioenergy Facility, the EPA reiterates that for purposes of determining the potential-to-emit (PTE) of a stationary source of SO_2, the PTE shall encompass the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Thus, emissions for all emission units that are part of the source's physical and operational design (installation) must be included in calculating PTE for purposes of determining SO_2 limitation compliance, including emission units that have been designated as "without limitations" and any designated "insignificant activities." Similarly, EPA has previously explained that when a source accepts a source-wide limit for a pollutant, all actual emissions of that pollutant, from the source, must be considered in determining compliance with the limit.

EPA recommends MDNR revise Permit Condition PW001 and Attachment A to ensure the source-wide SO_2 emission limit is enforceable. MDNR should clarify in the operating permit that the limits apply at all times to all actual source-wide SO_2 emission units must be considered in determining compliance with the limit.

Response to Comment:

- *AP-42's sulfur dioxide emission factor associated with burning natural gas is presented in Table 1.4-2 of Chapter 1.4 – Natural Gas Combustion. The footnote to the emission factor presented in the table (0.6 lbs./10^6 scf) states that the factor is based upon 100% conversion of fuel sulfur to SO_2. This assumes a sulfur content of natural gas of 2,000 grains per 10^6 standard cubic feet (scf). The SO_2 emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf.*

  Additionally, EPA's AP-42 - Chapter 1.4's background document agrees with EPA's comments in that SO_2 emissions should be calculated via mass balance… and that is exactly how the AP-42 emission factor was determined. Given that the AP-42 factor is based upon mass balance and the fact that the sulfur content in natural gas is fairly steady, the Air Pollution Control Program does not believe the actual sulfur contents will make a significant impact on the total SO_2 emissions from the installation.

  Nonetheless, Anheuser-Busch contacted Laclede Gas to determine the sulfur content of the gas the installation receives. Laclede conducts monthly samples, but this data is for internal purposes only. Laclede did acknowledge that based upon a 5-year average the sulfur content is 0.048 grains / 100 cft (or 480 grains/10^6 scf) – which is roughly 25% of the AP-42 factor.

  The Air Pollution Control Program believes it is unreasonable for a facility to conduct natural gas sampling to determine SO_2 emissions. The time and resources for this task exceed the value of the data and the impact on SO_2 emissions. As noted above, Laclede's own data shows that the sulfur content is 25% of the AP-42 level. Even though Anheuser-Busch could readily show a 75% reduction in SO_2 by taking the samples, there is no value in doing so.

- *Anheuser-Busch will calculate the SO_2 emissions from each significant source as required in the Title V draft permit. To capture the insignificant sources, Anheuser-Busch will determine the total natural gas usage associated with insignificant sources and then multiply this by either the AP-42 emission factor or mass balance as appropriate. The amount of natural gas associated with the insignificant sources will be determined by comparing the total natural gas consumed via vendor invoices minus the amount of natural gas consumed – and directly measured - by the significant sources.*

- *With respect to the statement: "the limits apply at all times to all actual source-wide SO_2 emissions to all actual source-wide SO_2 emission units." This is the standard required statement of the Plant-Wide Permit Conditions included in the permit, and no change has been made as a result of this comment.*

Comment #4: Column H, in the table on Attachment A is labeled "Cumulative NO_x Emissions (12-month rolling total) (tons) and Attachment A is tracking SO_2. Therefore, MDNR should correct the title to Column H on Attachment A.

Response to Comment: *The correction has been made.*

Public Notice Email to Applicant

Use the following text for the body of the public notice email. Include a pdf of the draft permit. The subject line should read –

Draft Part 70 Operating Permit for Anheuser-Busch, LLC, Project No. 2015-04-056

The Air Pollution Control Program (APCP) has completed the preliminary review of your Part 70 operating permit. We are placing a public notice draft permit on the Department's web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm. The public notice period will start on September 23, 2016, and will last for 30 calendar days.

We will accept comments regarding the draft permit postmarked on or before the closing date. It is very important that you read and understand this legal document. It is your responsibility to comply with this document. Please address comments or recommendations for changes to Michael Stansfield, P.E., Operating Permits Unit, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

A copy of this draft has also been sent to the U.S. EPA's Region VII office in Lenexa, Kansas, for their review. The Region VII office is afforded, by law, oversight authority on any Title V permit which Missouri (or any of the other states in the region) may propose to issue. A public hearing may be held if interest is expressed by the public.

Should you have any questions, or wish clarification on any items in this draft permit, please contact Michael Stansfield at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention.

Public Notice Email to Affected States and Indian Tribes

Use the following text for the body of the public notice email. The subject line should read –

Affected States Review for Anheuser-Busch, LLC

Illinois - brad.frost@illinois.gov
In accordance with Missouri State Rule 10 CSR 10-6.065(6)(F)2. and the Clean Air Act this email is to notify you of public notice of the preliminary draft and request for comments for:

Anheuser-Busch, LLC, located in St. Louis, MO 63118-1852
Project Number – 2015-04-056

A public notice draft permit will be available on the Department's web page no later than September 23, 2016, at http://dnr.mo.gov/env/apcp/permit-public-notices.htm. The public notice period will start on September 23, 2016, and will last for 30 calendar days.

You are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits by no later than October 23, 2016, to the attention of Michael J. Stansfield, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Comments may be emailed to apcppermitspn@dnr.mo.gov

Should you require further information or documentation on this matter, please contact the Operating Permits Unit at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Mr./Ms. FNAME LNAME
TITLE
INSTALL
ADDRESS
CITYSTZIP

RE: Part 70 Operating Permit, Project: PAMS
Response to Comments

Dear Mr./Ms.LNAME

If no changes were made to the draft, remove the third to last sentence in the next paragraph and remove the word "revised" from the last sentence in this paragraph.

The Missouri Air Pollution Control Program (APCP) has received comments submitted during the public comment period on the draft Part 70 Operating Permit for INSTALL. The APCP has revised your draft operating permit in response to all comments received. Enclosed is the APCP's response to these comments and a copy of the revised operating permit which is being submitted to the Environmental Protection Agency (EPA) for their review.

The EPA has 45 days from the receipt of this operating permit to notify the Missouri APCP of any objections. If the EPA has no objections, your operating permit will be issued shortly after this period. If the EPA does have objections, additional changes or revisions may be required to the operating permit to respond to the EPA's comments.

If you have any questions or additional comments, please contact Berhanu A. Getahun at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (314) 416-2960. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield
Environmental Engineer

MJS/ct initials

Enclosure: Proposed Final Title V Operating Permit
Response to Public Comments

c: PAMS File PAMS
Regional Office

Mr. James L. Bicklein
Anheuser-Busch, LLC
One Busch Place 137-1
St. Louis, MO 63118-1852

Re: Anheuser-Busch, LLC, 510-0003
Permit Number: OP2016-041

Dear Mr. Bicklein:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:bgj

Enclosures

c: PAMS File: 2015-04-056

MISSOURI DEPARTMENT OF NATURAL RESOURCES FOLDER TRANSMITTAL ROUTING SHEET	Operating Permits

Anheuser-Busch, LLC 2015-04-056

Originator: Berhanu A. Getahun Telephone: (314) 416-2451 Date: March 10, 2017

Typist: Joann Husong File Name: P:\APCP\Permits\Shared\Documents\Permit Projects\510-0003\2015-04-056 Anheuser Busch - P70 Renewal\2015-04-056 Anheuser-Busch_fnl.docx

SIGNATURE APPROVAL OF:

☐ Program Director ☐ Section Chief ☐ Unit Chief

ROUTE TO:

			Submitted	Returned
☐	Unit Chief – Initial Review	Date:	9/20/2016	09/22/2016
☐	Section Chief – Initial Review	Date:		
☐	Unit Chief – Response to Comments	Date:		
☐	Program Director	Date:		

Comments: